

#### PATENT

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Franklin C. Wong

Serial No.: 10/724, 027

Filed: November 26, 2003

For: RADIOPHARMACEUTICALS AND RADIOACTIVE MICROSPHERES FOR

LOCOREGIONAL ABLATION OF

**ABNORMAL TISSUES** 

Group Art Unit: 1618

Examiner: D. L. Jones

Atty. Dkt. No.: AND541/4-10US/64000

Confirmation No. 7270

# **DECLARATION OF DAVID J. YANG**

# I, DAVID J. YANG, Ph.D., HEREBY DECLARE AS FOLLOWS:

- 1. I am an Associate Professor at the Department of Experimental Diagnostic Imaging in UT M.D. Anderson Cancer Center ("M.D. Anderson"), one of six health institutions of The University of Texas System, which is the assignee of the above-referenced patent application.
- 2. Before I became an Assistant Professor at M.D. Anderson, I had my PhD training in Pharmaceutical Chemistry at University of Louisiana (Monroe, Louisiana) and postdoctoral training in Pharmacology and Radiochemistry at Marshall University School of Medicine (Huntington, West Virginia) and University of Michigan (Ann Arbor, Michigan). I am an expert in the fields of drug delivery and development, and I have extensive experience with molecular imaging technology in drug development. I have worked in the fields of Nuclear Medicine for 20 years.
- 3. My expertise in the areas of molecular imaging technology in drug development is evidenced by the fact that I have:
  - (i) authored approximately 89 scientific articles;

- (ii) 234 presentations and abstracts at scientific meetings;
- (iii) Memberships in various organizations; Society of Nuclear Medicine,
  American Chemical Society, American Association for Cancer Research,
  American Association for Cancer Research; and
- (iv) edited/authored 22 Book Chapters and listed inventor on 44 patents.

Further evidence of my expertise in these areas can be found in my curriculum vitae, a copy of which is attached hereto as Exhibit A.

- 4. I have reviewed the claims pending in U.S. Serial No. 10/724,027, and understand that the broadest claim of this application is as follows:
  - 1. A radiopharmaceutical macroaggregate composition for the treatment of abnormal tissue comprising particles having a minimum size of one micron, wherein the particles comprise a coprecipitate of a metal and one or more radioactive isotopes, and have sufficient radioactivity for locoregional ablation of cells in the abnormal tissue.
- 5. It is my understanding that the Examiner has rejected certain claims in U.S. Serial No. 10/724,027 in a first Office Action dated December 29, 2005 ("Action"), and maintained the rejections in a final Office Action dated August 14, 2006 ("Final Action"). I have reviewed both the Action and Final Action. I also have reviewed the response filed by the Applicant to the Action on May 1, 2006.
- 6. It is my understanding that the Examiner argues that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to generate a radiopharmaceutical composition having particles comprising a metal and one or more radioactive isotopes because Brodack et al discloses radionuclide labeled particles that meet the limitations of the instant invention.... Thus, one would be motivated to select the various components and specific elements of Applicant's elected species because the species components are each disclosed in the listings of Brodack et al." Action, p. 3.

- 7. In response, Applicant amended the claims to clarify that the claimed particles comprise a coprecipitate of a metal and one or more radioactive isotopes. In addition, the Applicant argued that Brodack et al. (U.S. Patent No. 5,560,901) does not disclose particles comprising a coprecipitate of a metal and one or more radioactive isotopes, and teaches away from such particles. The Final Action found this argument was unpersuasive, in part because the Final Action asserts that a "precipitate' is small particles that have settled out of a liquid or gaseous suspension by gravity, or that result from a chemical reaction."
- 8. I strongly disagree with the Examiner's statement that a "precipitate" is small particles "that result from a chemical reaction." This definition is too broad, and suggests that any small particles resulting from a chemical reaction can be referred to as a precipitate. This is not the definition of "precipitate" as generally understood by scientists.
- 9. I have reviewed and analyzed the disclosure of Brodack et al. In my opinion, Brodack et al. does not disclose particles comprising a coprecipitate of a metal and one or more radioactive isotopes, and nowhere does Brodack et al. suggest producing a coprecipitate of a metal and one or more radioactive isotopes.
- 10. I am surprised, after reviewing Applicant's disclosure, that the coprecipitation of a metal with one or more radioactive isotopes can concentrate the radioactive isotopes up to 100 fold in the particles generated. These coprecipitates are formed by alkalinization of soluble metal and radioactive isotope(s) to an appropriate pH to separate a coprecipitate of the metal and isotope(s) from the solution. This method is very different than the methods of preparation disclosed in Brodack. In addition, the resulting coprecipitates are different than the compositions disclosed in Brodack, in which the molecules themselves are manipulated to generate the disclosed compositions, for example by the activation of multiple organic moeities. Brodack et al., at col. 5, 11. 30-45. Importantly, the concentration of the radioactive isotopes generated according to Applicant's disclosure allows for the production of therapeutic radiopharmaceutical macroaggregate compositions in sufficiently small volumes for practical use. I would not have expected this result after reviewing Brodack et al.

- 11. In addition, Brodack et al. states that the particles of its disclosure are preferably "not prone to aggregation under the conditions used to prepare or store the radiation synovectomy agent." *Id.* at col. 3, ll. 7-10. In contrast, the pending claims are directed to radiopharmaceutical macroaggregate compositions, i.e., compositions formed by aggregation. The methods for preparing radionuclide labeled particles disclosed in Brodack et al. are not prepared by aggregation, which again distinguishes the disclosure of Brodack et al. from the Applicant's pending claims.
- 12. All statements made in this Declaration of my own knowledge are true and all statements made in this Declaration on information and belief are believed to be true, and these statements are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both under 18 U.S.C. § 1001 and may jeopardize the validity of this application or any patent issuing thereon.

10/13/2006	David J. Yang
D .	
Date	David J. Yang, Ph.D.

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Revised: 10/13/06

713-794-5456

# Exhibit A CURRICULUM VITAE

NAME: DAVID J. YANG, Ph.D.

TITLE/AFFILIATION:

(a) Primary Appointment: Associate Professor

Associate Chemist

Director of Pharmaceutical Development

Department of Experimental Diagnostic Imaging

Division of Diagnostic Imaging

University of Texas M.D. Anderson Cancer Center

(b) Joint/Adjunct Appointment: Associate Professor

University of Houston School of Pharmacy

Associate Professor

University of Texas Graduate School of Biomedical Sciences

Houston, TX

BIRTHDATE/PLACE: October 26, 1953, Taiwan

CITIZENSHIP: U.S. Citizen

HOME ADDRESS: 1123 Spinnaker Way TELEPHONE: 281-491-4175

Sugarland, Texas 77478

OFFICE ADDRESS, The University of Texas TELEPHONE: 713-794-1053

M. D. Anderson Cancer Center FAX:

Department of Experimental Diagnostic Imaging

Room #R6.2130, Box 59 1515 Holcombe Boulevard, Houston, Texas 77030

e-mail: dyang@di.mdacc.tmc.edu

MARITAL STATUS: Married

**LICENSURES-ACTIVE:** Pharmacist, License #05227, awarded in 1978,

Taiwan, Republic of China

**EDUCATION:** 

**GRADUATE:** Northeast Louisiana University, Ph.D.

Medicinal Chemistry,

September, 1978-May, 1983, Monroe, LA

**UNDERGRADUATE:** Taipei Medical College, B.S.

Pharmacy

September, 1974-June, 1978, Taipei, Taiwan

### POSTGRADUATE TRAINING:

Postdoctoral Fellow, Department of Pharmacology,

Marshall University School of Medicine,

Supervisor: Gary O. Rankin, Ph.D.

1983-1985, Huntington, WV

**SPECIALITY BOARDS:** 

None

**MILITARY/GOVERNMENT:** 

None

# **ACADEMIC & PROFESSIONAL APPOINTMENTS:**

Associate Professor (tenured) & Associate Chemist

Director of Pharmaceutical Development

Department of Experimental Diagnostic Imaging

Division of Diagnostic Imaging

University of Texas M. D. Anderson Cancer Center

(2004-present)

Associate Professor (tenured) & Associate Chemist

Director of Pharmaceutical Development

Department of Nuclear Medicine Division of Diagnostic Imaging

University of Texas M. D. Anderson Cancer Center

(1994-2004)

Assistant Professor and Assistant Chemist

Department of Nuclear Medicine

Division of Diagnostic Imaging

University of Texas M. D. Anderson Cancer Center,

(1988-1994)

**Assistant Professor** 

University of Texas Graduate School of Biomedical Sciences, Houston,

TX (1990-1994)

Research Investigator

Department of Internal Medicine

Cyclotron/PET Facility

University of Michigan

Ann Arbor, MI (1987-1988)

Assistant Director, Senior Research and Management Pharmacology

Division

Panlabs Taiwan, Ltd.

(subsidiary company of Panlabs Inc., Seattle, WA)

Taipei, Taiwan

(January, 1986-December, 1986)

Postdoctoral Fellow

Department of Pharmacology

Marshall University School of Medicine Huntington, WV (1983-1985) Teaching Assistant Northeast Louisiana University School of Pharmacy Monroe, LA (1980-1983)

Research Assistant Northeast Louisiana University School of Pharmacy Monroe, LA (1978-1980)

English Tutor Taipei Chien-Kuo Supplementary Senior High School Taipei, Taiwan (1975-1978)

Pharmacist Jen-Ai Hospital Taipei, Taiwan (1977-1978)

# a) Consultantships

Sumitomo Heavy Industries Tokyo, Japan (September 1, 1999-Present)

Anzai Medical Company Tokyo, Japan (January 1, 1997-Present)

Nihon Medi-Physics Pharmaceutical Company Tokyo, Japan (July 1, 1996-August, 1998)

# ADMINISTRATIVE APPOINTMENTS AND RESPONSIBILITIES:

Director of Radiopharmaceutical Development Department of Nuclear Medicine Division of Diagnostic Imaging (1994-present)

### **COMMITTEE MEMBERSHIPS:**

# a) M.D. Anderson Committee Memberships/Chairmanships:

Member of Isotope Committee The University of Texas MD Anderson Cancer Center September, 1995-August, 1998.

Study Section Review Committee

Basic Research Projects
Intstitutional Research Grants Program
The University of Texas M.D. Anderson Cancer Center
September, 2000-August, 2003

Member of Radioactive Drug Research Committee The University of Texas MD Anderson Cancer Center September, 2002-2004.

Member, UT M.D. Anderson Associates, 1989-present

Member, Institutional Biosafety Committee 2004-present

Member, Institutional NMR core facility Advisory Committee, 2005-present.

Faculty Senate, UT M.D. Anderson Cancer Center, 2005-2008

# b) Society Memberships with Offices held:

Member, American Association for Cancer Research, 1991-Present

Member, M. D. Anderson Associates, 1989-Present

Member, Society of Nuclear Medicine, 1988-Present

Member, American Association for the Advancement of Science, 1987-Present

Member, American Association of Pharmaceutical Scientists, 1986-Present

Full Member, Sigma Xi Fraternity,
Marshall University, Huntington, WV. 1984-Present

Member, Pharmacy Rho Chi Society Northeast Louisiana University, Monroe, LA., 1982-Present

Member, American Chemical Society, 1982-Present.

# **EDITORSHIPS AND EDITORIAL BOARD MEMBERSHIPS:**

### Journal Reviewer:

Reviewer for Journal of Pharmaceutical Sciences. (William Higuchi, Ph.D. Bradly Anderson, Ph.D. Editor-in-Chief). March 1, 1997- Present

Advisory Editorial Board for Annals of Nuclear Medicine & Sciences (Ren-Shyan Liu, M.D., Editor-in-Chief).

July 1, 1996- Present.

Advisory Editorial Board member, Recent Patents on Anti-Cancer Drug Discovery, 2005-present

Reviewer for Nutrition Research (Ranjit Kumar Chandra, M.D. Editor-in-Chief). January 1996- Present.

Advisory Editorial Board member, Annals of Nuclear Medicine, 2004-present

Annual meeting abstract reviwer for *Journal of Nuclear Medicine*, 1999-present

### HONORS AND AWARDS:

Society of Nuclear Medicine, Certificate of Merit, Honorable Mention. Award-winning scientific exhibit "New Autosynthetic Device for Production of Radiopharmaceuticals."

June 1-15, 44th Annual Meeting, San Antonio, TX (1997).

Award for Distinguished Young Investigators of the 6th Asia and Oceania Congress of Nuclear Medicine and Biology, Kyoto, Japan (1996).

Honorary Citizen of City of Monroe, LA (1982).

Honorary Citizen of City of West Monroe, LA (1982).

President of Chinese Student Association Northeast Louisiana University, Monroe, LA (1979-1981).

Vice President of International Student Association Northeast Louisiana University, Monroe, LA (1979-1980).

Award for Distinguished Young Investigator, 6<sup>th</sup> Asia and Oceania Congress of Nuclear Medicine and Biology, 1996

Certificate of Merit, Honorable Mention award winning scientific exhibit, "New Autosynthetic Device for Production of Radiopharmaceuticals", from the Society of Nuclear Medicine, 1997

Award for 14<sup>th</sup> Annual Winfield Evans Lecture at the 49<sup>th</sup> Annual Meeting of Southwestern Chapter of the Society of Nuclear Medicine, Austin, TX (April 3, 2004)

Award for 8<sup>th</sup> Asia Oceania Congress of Nuclear Medicine and Biology, Special Lecture on New Radiopharmaceuticals Beyond FDG, Beijing, China (October 11, 2004)

### LECTURESHIPS AND VISITING PROFESSORSHIPS:

Visiting Professor Taipei Veteran General Hospital National PET/Cyclotron Center Taipei, Taiwan (Aug. 1992; Aug. 1993; Aug. 1994)

Visiting Professor Dubai Hospital Dubai, UAE (Dec. 1997)

# ORGANIZATION OF NATIONAL OR INTERNATIONAL CONFERENCES

### National:

Co-Chairman, The 12<sup>th</sup> Annual Radiation Workshop, Advances in Imaging-Guided Diagnosis and Therapy, Round Top, Texas, 4/2004.

Co-organizer of Refresher Course: "Novel Tracers for Imaging", 90<sup>th</sup> Annual meeting of the Radiological Society of North America, Chicago, IL, AMA 1 credit,11/2004.

# International:

Chair of Plenary Sessions: Molecular Targeted Imaging in Oncology

Scientific Program Committee:

The IVth International Congress of Nuclear Oncology &

The VIIth Asia and Ociania Congress of Nuclear Medicine and Biology,

Istanbul, Turkey (Octobet 1-5, 2000)

# PATENTS PENDING AND GRANTED:

- 1. Yang DJ, Wallace S. High affinity halogenated tamoxifen derivatives and uses thereof. U.S. Patent #5,219,548 (UTMDACC:225), 6/15/93.
- 2. Yang DJ, Wallace M, Wallace S. Efficient microcapsules preparation and method of use. U.S. Patent #5,238,714. (UTMDACC:178), 8/24/93.
- 3. Yang DJ, Wallace M, Li C, Kuang L-R, Wallace S. Therapeutic and diagnostic use of modified polymeric microcapsules. European patent #93918214.3-2114 (UTMDACC:283), 1993.
- 4. Yang DJ, Wallace S. High affinity halogenated tamoxifen derivatives and uses thereof. U.S. Patent #5,192,525 (UTMDACC:189, 3/9/93.
- 5. Yang DJ, Wallace M, Li C, Kuang L-R, Wallace S. Therapeutic and diagnostic use of modified polymeric microcapsules. Japanese patent #504566(UTMDACC:283), 1994.
- 6. Yang DJ, Wallace S. High affinity halogenated-tamoxifen derivatives and uses thereof. European Patent #0551434 (UTMDACC:189), 11/15/95.
- 7. Yang DJ, Wallace S. High affinity halogenated tamoxifen derivatives and uses thereof. Canadian Patent #2,092,996. (UTMDACC:189), 1995.

8. Yang DJ, Wallace S. High affinity halogenated tamoxifen derivatives and uses thereof. Japanese Patent #518057/91. (UTMDACC:189), 1995.

- 9. Li C, Wallace S, Kan Z, Yang DJ, Kuang L-R. Particulate contrast media derived from non-ionic water soluble contrast agents for CT enhancement of hepatic tumors. U.S. patent S/N 08,225665. (Filed 4/11/94)(UTMDACC:006RA), 1995.
- 10. Yang DJ, Wallace M, Wallace S. Efficient microcapsules preparation and method of use. European patent #92901967.7-2104. (UTMDACC:243). 6/21/95
- 11. Yang DJ, Wallace M, Wallace S. Efficient microcapsules preparation and method of use. Australian patent #659622. (UTMDACC:243), 9/12/95.
- 12. Yang DJ, Wallace M, Wallace S. Efficient microcapsules preparation and method of use. Canadian patent #2,092,551 (UTMDACC:243), 1995.
- 13. Yang DJ, Wallace M, Wallace S. Efficient microcapsules preparation and method of use. Japanese patent #501033/92 (UTMDACC:243), 1995.
- 14. Yang DJ, Wallace M, Li C, Kuang L-R, Wallace S. Therapeutic and diagnostic use of modified polymeric microcapsules. Australian patent #47743/93. (UTMDACC:283), 1996.
- 15. Yang DJ, Wallace M, Li C, Kuang L-R, Wallace S. Therapeutic and diagnostic use of modified polymeric microcapsules. US Patent #5,484,584 (UTMDACC:283), 1/16/96.
- 16. Yang DJ, Wallace S. High affinity halogenated tamoxifen derivatives and uses thereof. Australian Patent #664161 (UTMDACC:189), 2/27/96.
- 17. Yang DJ, Wallace M, Li C, Kuang L-R, Wallace S. Therapeutic and diagnostic use of modified polymeric microcapsules. Canadian patent #2,140,333, (UTMDACC:283), 3/28/96.
- 18. Li C, Wallace S, Kan Z, Yang DJ, Kuang L-R. Particulate contrast media derived from non-ionic water soluble contrast agents for CT enhancement of hepatic tumors. U.S. Patent number 5,686,061, 1997
- 19. Wallace S, Yang DJ, Cherif A. 2'-Nitro-1'-imidazolyl-2,3-isopropylidene-4-tosylbutanol, a precursor to F-fluoroerythronitroimidazole PET imaging agent. U.S. Patent 5,728,843. (UTMDACC:415PCT), awarded 3/17/98.
- 20. Li C, Wallace S, Yu D-F, Yang DJ. Water-soluble paclitaxel prodrugs. U.S. patent #5,977,163. (IDR95:051) Awarded 11/2/99.
- Yang DJ, Cherif A, Wallace S. Rapid synthesis and use of <sup>18</sup>F-fluoromisonidazole and analogs. US Patent No. 5,886,190. (UTMDACC:352), awarded 3/23/99.
- Wallace S, Yang DJ, Delpassand ES, Cherif A, Quadri S. High affinity tamoxifen derivatives.

  Development of <sup>111</sup>In-DTPA-TX conjugate as new imaging kit for ER(+) lesions.. U.S. Patent No. 6,096,874. (UTMDACC: 439), awarded 8/1/2000.
- 23. Li C, Wallace S, Yu D-F, Yang DJ. Water soluble paclitaxel prodrugs. U.S. Patent number 6,262,107 (July 17, 2001)

24. Li C, Wallace S, Yu D-F, Yang DJ. Water soluble paclitaxel derivatives. U.S. Patent number 6,441,025 (August 27, 2002)

- 25. Li C, Wallace S, Yu D-F, Yang DJ. Water soluble paclitaxel derivatives. U.S. Patent number 6,515,017 (February 4, 2003)
- 26. Li C, Wallace S, Yu D-F, Yang DJ. Water soluble paclitaxel derivatives. U.S. Patent number 6,730,699 (May 4, 2004)
- 27. Tanaka A, Inoue T, Katsumi T, Yang DJ, Kim EE. Imaging agents, precursors thereof and methods of manufacture. (MDA01-034) US Patent 6,824,760, (11/30/2004).
- 28. Yang DJ, Yu D-F, Azhdarinia A, Lee T, Kim EE.: Local regional chemotherapy and radiotherapy using in situ hydrogel, U.S. patent (UTXC:681USP1/10025519, MDA01-007), U.S. Patent number 7,008,633 (March 7, 2006).
- 29. Yang DJ, Yu D-F, Oh C-S, Bryant J. Ethylenedicysteine (EC)-Drug Conjugates Compositions and Methods for Tissue Specific Disease Imaging, U.S. patent S/N 60/424,493. UTMDACC:02-073 (UTXC:758USP1), 9/18/2002 filed, US Patent (pending) 2003.
- 30. Yang DJ, Yu D-F, Kim EE. Ethylenedicysteine (EC)-Drug Conjugates Compositions and Methods for Tissue Specific Disease Imaging, US patent S/N 10/672,763, UTXC:664/USC1, 6/21/2000 filed, U.S. Patent number 7,067,111 (June 27, 2006).
- 31. Yang DJ, Yu D-F, Kim EE. Ethylenedicysteine (EC)-Drug Conjugates Compositions and Methods for Tissue Specific Disease Imaging, US patent S/N 10/672,142. UTXC:664/USC2, 6/21/2000 filed, U.S. Patent (Pending) 2003.
- 32. Yang DJ, Liu C-W, Yu D-F, Kim EE. Ethylenedicysteine (EC)-Drug Conjugates Compositions and Methods for Tissue Specific Disease Imaging, U.S. patent S/N 09/434,313. UTMDACC:627, 10/25/99 filed (MDA99-040); US Patent number 6,692,724 (2/17/2004).
- 33. Yang DJ, Oh C-S, Kohanim S, Yu D-F, Azhdarinia A, Stephens S. Mechanism-based targeted pancreatic beta cell imaging and therapy (MDA03-059) U.S. Patent (Pending) 2004.
- 34. Chao CKS, Yang DJ, Yang J-H, Yu D-F, Azhdarinia A. Multipurpose automated radiotracer synthesizer (MARS):manufacturing and use (MDA03-044, UTSC795) U.S. Patent (Pending) 2004.
- 35. Yang DJ, Oh C-S, Kohanim S, Yu D-F, Azhdarinia A, Kim EE. Poly(peptide) as a chelator: methods of manufacture and uses (MDA03-026) U.S. Patent (Pending) 2004.
- 36. Chao CKS, Yang DJ, Mourtada F. System and methods for an automated synthesis of Gallium-68 Generator-Based Radiopharmaceutical Agents.. (MDA04-016) U.S. provisional Patent 60/538191, 2004.
- 37. Yang DJ, Oh C-S, Kohanim S, Yu D-F, Azhdarinia A. Tetraazacyclopentadecane (N4)-sugar conjugates, compositions and methods for cellular imaging and therapy (MDA04-034), UTSC 870. U.S. Patent U.S. Patent serial #60/745,148 (pending), 2004.
- 38. Yang DJ, Yu D-F, Chanda M, Azhdarinia A, Oh C-S, Kim EE. Oligosaccharide conjugates for dual imaging and radio/chemotherapy: composition, manufacturing and applications (MDA04-110)

- (UTSC:900USP1)U.S. Patent (pending), 2004..
- 39. Yang DJ, Yu D-F, Wei I-C. Glycopeptide: Compositions and Methods of Manufacturing and Biomaterial Applications (MDA04-063) U.S. Patent (pending), 2004.
- 40. Yang DJ, Gelovani J, Oh C-S, Azhdarinia A, Mendez R. Efficient synthesis of 5-[<sup>18</sup>F]fluoropropoxy tryptophan: composition, manufacturing and use. (MDA05-105) 2005 (submitted).
- 41. Li C, Wallace S, Yu D-F, Yang DJ. Water soluble paclitaxel derivatives. US Patent number 6,884,817 (April 26, 2005).
- 42. Yang DJ, Yu D-F. Platinum-polysaccharide conjugates: compositions, manufacturing and methods for cancer therapy MDA05-120 (UTSC:945PSC), US patent pending.
- 43. Yang DJ, Kurzrock R, Kohanim S, Gong J. Prediction of Therapeutic Response for Anti-Tyrosine Kinases Using Theranostic Antiphosphotyrosine Antibody: Composition, Manufacturing and Use. MDA06-088, May, 2006 US patent pending.
- 44. Mourtada F, Azhdarinia A, Yang DJ, Oh C-S. Automated System for Formulating Radiopharmaceuticals," U.S. Provisional Pat. Application SN 60/822,306 (MDA-06-081) AND541/4-29PROUS/48010

# **GRANT/CONTRACT SUPPORT:**

# **Completed Grants**

Evaluation of automated synthesis apparatus (LS 99-355). P.I.: Yang, DJ. Supported by Sumitomo Heavy Industries (Tokyo, Japan), September 1, 1999-August 31, 2003, \$40,000

Evaluation of formulation of natural products for prostate cancer therapy (LS98-044), P.I.: Yang, D.J., Contractor: Hande Technology and Development Company (Houston, TX), August, 1998-August, 2002, \$200,000.

Evaluation of anticancer drugs. P.I.: Yang, DJ., Supported by Pioneer Pharmaceutical Research Corporation (San Francisco, CA) August 1998-present, \$250,000 (donation).

Development of I-125 labeled seeds for brachytherapy of prostate cancer., P.I.: Yang, DJ., Contractor: International Isotope Incorporation (Denton, TX), February, 1998- Sept. 1999, \$81,250.

Transfusion of Platelets from Platelet Concentrates Stored at 4°C with ThromboSol<sup>TM</sup> to Healthy Volunteers, P.I.: Benjamin Lichtiger, M.D., Collaborator, **Yang, DJ.**, Contractor: Life Cell Corporation, December, 1997-Present, \$28,000.

Evaluation of new imaging ligands for nuclear medicine, P.I.: Yang, DJ. Supported by Nihon Medi-Physics (Tokyo, Japan), August, 1997-1998, \$20,000.

Single Photon Emission Computed Tomography Using [123I] Iodotamoxifen to Evaluate Therapeutic Responses in Patients with Breast Cancer. P.I.: **Yang, DJ.** Awarded Breast Cancer Research Program, UT M. D. Anderson Cancer Center, January, 1997-1998, \$20,000,

Targeted Nonviral Gene Delivery System. P.I.: Nichol, C.A.; Co-investigator, Yang, DJ. Awarded Biomedical Research Support Grant, January, 1997-1998, \$15,000.

Nonviral Gene Therapy Using New Polymers and Targeting Agents. P.I.: Nichol, C.A.; Co-investigator, Yang, DJ. Awarded Radiological Society of North America 1996 Seed Grant, March, 1997-March, 1998, \$19,990.

Ultrasound-guided percutaneous intratumoral injection of cisplatin microspheres in VX-2 tumor-bearing rabbits. P.I.: Kuang, L-R; Co-investigator, Yang, DJ. Awarded RSNA Seed Grant, December, 1995- November, 1996, \$19,950.

Biodegradable polydepsipeptide labeled with Gd-DTPA as a functional contrast agent for MR Imaging. P.I. Li C.: Co-investigator: Yang, DJ. Awarded Basic Research Science Grant, January 1995-January 1996, \$24,546.

Particulate Nonionic Contrast Material for Improved Detection of Hepatic Neoplasms by CT. P.I.: Li, C; Coinvestigator **Yang, DJ.** Awarded Physicians Referral Service, July 1994-July 1996, \$28,967,

Synthesis and Evaluation of New Misonidazole Analogue for Tumor Hypoxia. P.I.: Cherif, A.; Co-investigator, Yang, DJ. Awarded RSNA Seed Grant, December, 1994- November, 1995, \$19,900.

Development of Long Circulating Biodegradable Radiopaque Microparticles as a Blood-pool Imaging Agent. P.I.: Li C; Co-investigator, Yang, DJ. Awarded RSNA Seed Grant, December, 1994- November, 1995, \$19,650.

Tamoxifen Analogues for Breast Tumor Imaging and Therapy Applications. P.I.: Yang, DJ. Awarded from American Cancer Society, January, 1993- June, 1997, \$310,000

Clinical Phase I Study of Tamoxifen Analogue in Breast Cancer Patients. P.I.: Yang, DJ. Awarded from Physician's Referral Service, January, 1993- December, 1994, \$20,000.

Application of Microcapsules for Tumor Diagnosis and Therapy. Evaluation of Tamoxifen Analogs for Breast Tumor Imaging and Therapy. P.I.: Wallace, S. Collaborator; **Yang, DJ.**, supported by George & Cleo Cook Fund, 1988-1989, \$100,000; 1990-1994, \$500,000; 1995-1997, \$300,000.

<sup>99m</sup>Tc-EC-Endostatin: Imaging, Response and Prognosis, Entremed, Inc. (Boston, MA), Principal Investigator, Yang, DJ.,SR 00-248, 6/1/00-5/31/01, \$63,950

Molecular Imaging with <sup>99m</sup>Tc-Peptide Conjugates, Daiichi Radioisotope Laboratories, Ltd., Tokyo, Japan, Principal Investigator, Yang, DJ., SR01-253, 7/1/01-7/1/03, \$125,000 (\$75,000 year 1, \$50,000 year 2)

Automation synthesis of PET tracers, Ho Kong Molecular Imaging Tech, Inc. (Taiwan), Principal Investigator, Yang, DJ., SR01-351, 10/1/01-10/1/02, \$50,000

PET tracers in oncology, Medics Japan, Ichibancho, Sendai, Japan, Principal Investigator, Yang, DJ., LS01-197, 5/15/01-5/15/03, \$40,000 (\$20,000/year)

Evaluation of autosynthetic device for radiochemistry, Anzai Medical Company (Tokyo, Japan), Principal Investigator, Yang, DJ., LS 97-022, 4/97-4/04, \$70,000 (\$10,000/year).

Comparison of Tc-99m-EC-deoxyglucose and FDG-PET Scans for the Identification of Persistent/Recurrent Squamous Cell Carcinoma of the Glottic Larynx After Definitive Treatment (ID01-415). Cell>Point Company (Houston, TX), Principal Investigator, Schechter, N., Collaborator Yang, DJ., 11/13/2001 - 10/31/2003, \$493,745.

CT and MRI functional agents development and evaluation. VeriMed Research Company (Houston, TX). Principal Investigator, Yang, DJ., (SR 2002-00007147SM, 5/31/02-5/31/05, \$1,000,000

New imaging kit for assessment of estrogen receptors with Single Photon Emission Computed Tomography. US Army Breast Cancer Concept grant BC03298, PI. E. Edmund Kim, M.D., Collaborator Yang, DJ., (5%), 9/04 – 8/05 Total direct costs \$75,000

Biokinetics of MicellarPaclitaxel Formulation, Samyang Company (Seoul, Korea). Principal Investigator, Yang, DJ., LS2004-00012233RM, 9/2004-8/2005, \$90,575

Hypoxia Imaging-guided IMRT, NIH-NCI R01 CA89198-01 PI: K.S. Clifford Chao, M.D., Collaborator (5%), Yang, DJ., 3/01 – 2/05 Total direct costs \$501,000

# **Active Grants**

Polymeric conjugates for disease targeting, HOPAX Chems, MFG, Co., Ltd., (Taiwan), Principal Investigator, Yang, DJ., LS2003-00009724SP 01, 08/01/2003 - 02/01/2013, \$500,000 (\$50,000/year, total 10 years).

<sup>99m</sup>Tc-Ethylenedicysteine (EC)-drug conjugates for tissue specific disease imaging, Cell>Point Biotechnology Company (Houston, TX). Principal Investigator, **Yang, DJ.,** LS01-212, 5/21/01-5/20/08, \$1,400,000 (\$200,000/year, total 7 years)

Local regional chemotherapy and radiotherapy using in situ hydrogel, Cell>Point Biotechnology Company (Houston, TX). Principal Investigator, **Yang, DJ.**, LF2003-00009935DH, 12/1/03-12/1/08, \$250,000 (\$50,000/year, total 5 years)

N4-technology for tumor targeted imaging and therapy, Cell>Point Biotechnology Company (Houston, TX). Principal Investigator, Yang, DJ., LS2005-00012803PL, 3/1/2005-2/28/2010, \$500,000 (\$100,000/year, total 5 years)

Formulation of radiolabeled glycopeptide for PET and SPECT imaging (MDA04-063). HOPAX Chems, MFG, Co., Ltd. (Taiwan). Principal Investigator, Yang, DJ., SR051-2825, September, 2004-August, 2006, \$60,000 (\$30,000/year)

Molecular Imaging with Peptide Conjugates (MDA03-026), TRS Company (Tokyo, Japan). Principal Investigator, Yang, DJ., LS2005-00012824PL September, 2004-August, 2006, \$60,000 (\$30,000/year)

Oligosaccharide conjugates for dual imaging and radio/chemotherapy: composition, manufacturing and applications (MDA04-110) Cell Point Biotechnology Company (Houston, TX), Principal Investigator, Yang, DJ., LS2005-00015155LE, 9/1/2005-8/31/2010, \$400,000 (\$80,000/year, total 5 years).

Anti-neoplastic effect of a novel platinum- complex on cisplatin-sensitive and resistant ovarian cancer in vitro and in vivo, MDACC IRG, Principal Investigator: Hu, W., Co-Principal Investigator: Yang, DJ., 4/2005-4/2006, Direct cost: \$49,400.

MR assessment of antiangiogenic therapy, NIH-NCI Project 4 of U54 grant CA90810-01 Principal Investigator, Abbruzzese JL, Collaborator (5%), Yang, DJ., 7/01-12/06, Total direct costs (Project 4 only) \$662,885

Principal Investigator: Gabriel N. Hortobagyi, M.D.; Co-P.I.-Mien-Chi Hung, Ph.D. Collaborator: David J. Yang, Ph.D. (5%) 1P50CA116199-01 Breast SPORE Project 5 "Targeting Breast Cancer-Specific Gene Therapy" Project Period: 9/01/2005-8/31/1010 The Direct Costs for Year 1 \$225,956.

# Grant Reviewer/Service on NIH/Other Study Sections:

- 1. Invited Speaker, Generator-Produced Agents for Molecular Targeted Imaging, at the Hypoxia Imaging Techniques Meeting (organized by National Cancer Institute), Arizona Golf Resort and Conference Center, Mesa, AZ, April 5-6, 2004.
- 2. NIH Scientific Review Special Emphasis Panel (Scientific Review Group ZRG1 DIG E-50S, Organized by Gopal C. Sharma, Ph.D., Chair: Ambitabh Chak, M.D. June 7, 2004.
- 3. NIH Scientific Review Special Emphasis Panel/Initial Review Group 2004/01 ZRG1 DIG-E (50S), Organized by Gopal C. Sharma, Ph.D., 10/28/2004.
- 4. NIH Scientific Review Special Emphasis Panel/Initial Review Group 2005/01 ZRG1 DIG-E (50S), Organized by Gopal C. Sharma, Ph.D., 2/23/2005.
- 5. NIH Scientific Review Special Emphasis Panel/Initial Review Group 2005/01 ZRG1 DIG-E (50S), Organized by Gopal C. Sharma, Ph.D., 6/10/2005.
- 6. NIH Scientific Review Special Emphasis Panel/Initial Review Group 2006/01 ZRG1 DIG-E (50S), Organized by Gopal C. Sharma, Ph.D., 3/7/2006.
- 7. NIH Scientific Review Special Emphasis Panel/Initial Review Group 2006/01 ZRG1 DIG-E (50S), Organized by Rass Shayiq, Ph.D. 6/28/2006

# **TEACHING**

Formal Teaching: N/A

# **Courses Taught:**

Instructor: Medicinal Chemistry, Northeast Louisiana University, Undergraduate level 1979-1982.

Instructor: Toxicology, Marshall University School of Medicine, Graduate level, 1986-1987.

Instructor: Microcapsules, Theory and Medical Applications, School of Pharmacy, University of

Houston, Undergraduate level, 4 semester hours, 2/1996.

Instructor: Cancer Therapy Using Microcapsules, G.S.B.S., Graduate level, 4 semester hours,

4/7-5/31/1998,

Instructor: Radionuclide Therapy, Nuclear Medicine Physics, G.S.B.S., 020193, 3 semester hours, 4/2000

Instructor: Non-imaging tests, Nuclear Medicine Physics, G.S.B.S., 020193, 3 semester hours, 4/2000

Instructor: Radionuclide Therapy. Introduction to Medical Physics IV, G.S.B.S., 020193,

3 semester hours, 3/2001.

Instructor: Radionuclide Therapy. Introduction to Medical Physics IV G.S.B.S., 020193,

3 semester hours, 4/2002.

Instructor: Radionuclide Therapy. Introduction to Medical Physics IV G.S.B.S., 020193,

3 semester hours, 4/2003.

Instructor: Mechanism-Based Targeted Cellular Imaging in Oncology, Pharmaceutical Engineering,

Department of Bioengineering, Rice University, 3/2003

Instructor: Imaging molecular signatures by nuclear imaging modalities, undergraduate physiology,

Department of Bioengineering, Rice University, 2/2005

Instructor: Image-guided targeting of molecular signature events, Pharmaceutical Engineering,

Department of Bioengineering, Rice University, 3/2005

# **Training Programs:**

Instructor: "How to make microcapsules," Washington University, St. Louis, MO, 9/1989.

"cGMP Training for the Biotechnology and Pharmaceutical Industries", Philadelphia, Pennsylvania, September 15-16, 2005. (Organized by SPI USA and University of Maryland, Baltimore, MD, www.usapi.com)

Other Educational Programs: N/A.

#### SUPERVISORY TEACHING

# **Advisory committees:**

- Member, Dissertation Advisory Committee, Department of Radiation Physics, G.S.B.S., Eduardo Galiano, Ph.D. 6 hours, 1994.
- Member, Dissertation Advisory Committee, Department of Pharmacology, G.S.B.S., Virginia Wilson, Ph.D., 6 hours, 1994-1996.
- Member, Dissertation Advisory Committee, Department of Pharmacology, G.S.B.S., Saeed U. Kahn, Ph.D., 6 hours, 1996-1997.
- Member, Dissertation Advisory Committee, Department of Tumor Biology, G.S.B.S., Xiangming Xing, Ph.D., 6 hours, 1996-1997.
- Member, Thesis Advisory Committee, Department of Analytical Chemistry, G.S.B.S., John Koomen, 6 hours, 1997-1998.
- Member, Dissertation Advisory Committee, Department of Computer Science, University of Houston, Wei-Min Jeng, Ph.D., 6 hours, 1/1997-5/1999.

### **Supervisory Committees:**

- Chair, Thesis Supervisory Committee, University of Houston School of Pharmacy, Adwoa Nornoo, 6 hours, 8/1994-9/1995.
- Chair, Thesis Supervisory Committee, University of Houston School of Pharmacy, Angela Joubert, 6 hours, 8/1994-9/1995.
- Chair, Thesis Supervisory Committee, G.S.B.S., Ali Azhdarinia, 6 hours, 1/2000-5/2001.
- Chair, Dissertation Supervisory Committee, G.S.B.S., Ali Azhdarinia, Ph.D. 6 hours, 7/2001-5/2005.
- Chair, Thesis Supervisory Committee, G.S.B.S., Richard Mendez, M.S. 6 hours, 9/2002-12/2004.

# **Direct Supervision:**

# **Undergraduate Students and Allied Health Students:**

- Mentor, UT M.D. Anderson, Kevin Chu (Texas A&M University, Department of Biology), summer student, 5/1991 8/1991.
- Mentor, UT M.D. Anderson, Sarah Nikiforow (Princeton University, Department of Chemical Engineering), summer student, 6/1991-8/1991.
- Mentor, UT M.D. Anderson, Tony Tsi, (University of Texas at Austin, Department of Biology), summer student, 6/1992-8/1992.
- Mentor, UT M.D. Anderson, Walter Lin, (Stanford University, Department of Biology), summer student, 6/1992-8/1992.
- Mentor, UT M.D. Anderson, Matthew Gretzer, (University of Colorado, Department of Biology), summer student, 6/1992-8/1992.
- Mentor, UT M.D. Anderson, Eddie Huang (Rice University, Department of Social Sciences), summer student, 6/1992-8/1993.
- Mentor, UT M.D. Anderson, David T. Chang, (University of Michigan), summer student, 6/1995-8/1995.
- Mentor, UT M.D. Anderson, Charleen Miguel, (University of Texas at Austin, Department of Biology), summer student, 6/1995-8/1995.
- Mentor, UT M.D. Anderson, Vince Kumar, (Franklin and Marshall College, Department of Biology, Lancaster, PA), summer student 6/1995-8/1995.
- Mentor, UT M.D. Anderson, Albert He, (University of Chicago, Department of Biology, Chicago, IL.), summer student, 6/1998-8/1998.
- Mentor, UT M.D. Anderson, Peng Wu, (Cornell University, Department of Biology, Ithaca, NY), summer student, 6/2000-8/2000.
- Mentor, UT M.D. Anderson, Jason Yang, (Stanford University, Department of Biology, Stanford, CA.), summer student, 6/2000-8/2000.

- Mentor, UT M.D. Anderson, Albert He, (University of Chicago, Department of Biology, Chicago, IL.), summer student, 6/2000-8/2000.

- Mentor, UT M.D. Anderson, Diane Kim, (Vanderbilt University, Department of Biology, Nashville, TN.), summer student, 6/2000-8/2000.
- Mentor, UT M.D. Anderson, Sahar Kohanim, (University of Chicago, Department of Biology, Chicago, IL), summer student, 6/2001-8/2001.
- Mentor, UT M.D. Anderson, Jonathen Huang, (Bellaire High School, Houston, TX), summer student, 6/2001-8/2001.
- Mentor, UT M.D. Anderson, Sahar Kohanim, (University of Chicago, Department of Biology, Chicago, IL), summer student, 6/2002-8/2002.
- Mentor, UT M.D. Anderson, Jonathen Huang, (Bellaire High School, Houston, TX), summer student, 6/2002-8/2002.
- Mentor, UT M.D. Anderson, Athena Hamidzadeh, (University of Houston, Department of Biology, Houston, TX), summer student, 6/2002-8/2002.
- Mentor, UT M.D. Anderson, Vincenzo K. Wong, (University of Texas at Austin, Department of Biology), summer student, 6/2003-8/2003.
- Mentor, UT M.D. Anderson, Allison Greenwell, (Duke University Department of Biomedical Engineering), summer student, 6/2004-8/2004.
- Mentor, UT M.D. Anderson, Sterlin Wei, (University of Texas at Austin, Department of Electrical Engineering), summer student, 6/2004-8/2004.
- Mentor, UT M.D. Anderson, Allison Greenwell, (Duke University Department of Biomedical Engineering), summer student, 6/2005-8/2005.
- Mentor, UT M.D. Anderson, Sterlin Wei, (University of Texas at Austin, Department of Electrical Engineering), summer student, 6/2005-8/2005.
- Mentor, UT M.D. Anderson, Jennifer Lai, (Rice University Department of Biology), summer student, 6/2005-8/2005.
- Mentor, UT M.D. Anderson, Torrant Yao, (University of Texas at Austin, Department of Pharmacy), summer student, 6/2005-8/2005.
- Mentor, UT M.D. Anderson, Jae Kim, (University of Texas at Austin Department of Chemistry), summer student, 6/2005-8/2005.
- Mentor, UT M.D. Anderson, Francis Ahn, (Boston University, Department of Biology), summer student, 6/2005-8/2005.
- Mentor, UT M.D. Anderson, Sterlin Wei, (University of Texas at Austin, Department of Electrical Engineering), summer student, 6/2006-8/2006.
- Mentor, UT M.D. Anderson, Andy Lee, (University of Virginia, Department of Chemistry), summer student. 6/2006-8/2006.
- Mentor, UT M.D. Anderson, Joyce Kuo, (Rice University, Department of Biology), summer student, 6/2006-8/2006.

Medical Students: N/A

#### Postdoctoral Research Fellows:

- UT M.D. Anderson, R.G. Moult, MD, Department of Diagnostic Radiology, RG Moult, MD, June, 6/1990-6/1991.
- Faculty, UT M.D. Anderson, Department of Diagnostic Radiology, Chun Li, PhD., 2/1991-2/1994.
- UT M.D. Anderson, Department of Diagnostic Radiology, L-R Kuang, MD., 2/1989-6/1997.
- UT M.D. Anderson, Department of Diagnostic Radiology, Abdallah Cherif, PhD., 9/1992-8/1997.
- UT M.D. Anderson, Department of Diagnostic Radiology, Matthew Gretzer, 1/1993-8/1994.
- UT M.D. Anderson, Department of Nuclear Medicine, Tomio Inoue, MD., 6/1994-8/1995.
- UT M.D. Anderson, Department of Nuclear Medicine, Noboru Oriuchi, MD, 8/1995-4/1997.
- UT M.D. Anderson, Department of Nuclear Medicine, Tetsuya Higuchi, MD., 8/1997-12/1998.
- UT M.D. Anderson, Department of Nuclear Medicine, Seyfettin Ilgan, M.D., 9/1997-8/1998.

- UT M.D. Anderson, Department of Nuclear Medicine, Chang-Sok Oh, Ph.D. March, 3/1998-March, 3/1999.

- UT M.D. Anderson, Department of Nuclear Medicine, Kaoru Ozaki, Ph.D., 6/2001-3/2003.
- UT M.D. Anderson, Department of Nuclear Medicine, Masashi Yukihiro, M.D., 7/2001-8/2002.
- UT M.D. Anderson, Department of Nuclear Medicine, Chang-Sok Oh, Ph.D., 8/2001-present.
- UT M.D. Anderson, Department of Nuclear Medicine, Megumi Ito, M.S., 4/2003-9/2004.
- UT M.D. Anderson, Department of Experimental Diagnostic Imaging, Mithilesh Kumar, 4/2003 10/2003.
- UT M.D. Anderson, Department of Experimental Diagnostic Imaging, Ellis Shyue-Luen Chang, M.D., 2/2004-July 1, 7/2004.
- UT M.D. Anderson, Department of Experimental Diagnostic Imaging, Ho-Chun Song, M.D., 1/2004-February 11, 2/2004.
- UT M.D. Anderson, Department of Experimental Diagnostic Imaging, Alper Karacalioglu, M.D., 9/2004-August, 9/2005.
- UT M.D. Anderson, Department of Experimental Diagnostic Imaging, Takahashi Nobukazu, M.D., 9/2005-3/2006.
- UT M.D. Anderson, Department of Experimental Diagnostic Imaging, Hiroaki Kurihara, M.D. 4/2006present.
- UT M.D. Anderson, Department of Experimental Diagnostic Imaging, Mithu Chanda, Ph.D., 4/2005-Present.
- UT M.D. Anderson, Department of Experimental Diagnostic Imaging, Ali Azhdarinia, 7/2005-8/2006.

# PRESENTATIONS AT NATIONAL OR INTERNATIONAL CONFERENCES

#### Invited:

Invited Speaker, Potential breast tumor imaging agent: fluorotamoxifen and derivatives. International symposium on radiopharmaceutics synthesis, Quality Assurance and Regulatory Control, American Chemical Society Nuclear Chemistry and Technology Division, 200th Annual Meeting, Washington D.C., 8/1991.

Invited Speaker, Development of fluoro analog of tamoxifen for imaging estrogen receptors by PET, 47<sup>th</sup> Southwest Regional American Chemical Society Meeting, Medicinal Chemistry Division, Robert Lyle, Ph.D. Organizer, San Antonio, Texas, 10/1991

Invited Speaker, Tamoxifen analogs, microcapsules and tumor targeting, University of Texas Medical School, Department of Obstetrics, Gynecology and Reproductive Sciences. Houston, Texas, 9/1992

Invited Speaker, Application of cyclotron-produced isotopes in breast tumor imaging. 7th Annual Meeting of American Association of Pharmaceutical Scientists. San Antonio, Texas, 9/1992.

Invited Speaker, Receptor targeting with PET radiotracers for breast tumor imaging. 206th National Meeting of the American Chemical Society. Nuclear Chemistry and Technology. Chicago, IL, 8/1993.

Invited Speaker, CT liver enhancement with poly (d, 1-lactide) microencapsulated contrast media. Contrast Media Research Conference, San Antonio, TX, 10/1993.

Invited Speaker, Positron Emission Tomography- Application in Oncology, School of Pharmacy, Northeast Louisiana University, Monroe, LA, 1/1994.

Invited Speaker, New Ligands for Tumor Targeting, School of Pharmacy, University of Houston, Houston, TX, 10/1994

Invited Speaker, PET and SPECT New Radioligands for Tumor Imaging and Therapy, Cook Imaging Corporation, Bloomington, Indiana, 10/1994

Invited Speaker, Cancer Diagnosis and Therapy with New Ligands, Department of Nuclear Medicine, Seoul National University Hospital, Seoul, Korea, 17, 1/1995

Invited Speaker, New Ligands for Tumor Diagnosis and Therapy, Department of Obstetrics & Gynecology, Taipei Medical College, Taipei, Taiwan, 1/1995

Invited Speaker, New Ligands for Cancer Diagnosis and Therapy, Department of Radiology, Fort Sam Houston, Brooke Army Medical Center, Texas, 1/1995

Invited Speaker, New Ligands for Cancer Imaging and Therapy Applications, National PET/Cyclotron Center, Taipei Veterans General Hospital, Taipei, Taiwan, 5/1995

Invited Speaker, New Ligands for Cancer Imaging and Therapy Applications, Atomic Energy Council, Lung-Tan, Taiwan, ROC, Institute of Nuclear Energy Research, Taiwan, 5/1995

Invited Speaker, New Ligands for Cancer Imaging and Therapy Applications, Department of Obstetrics & Gynecology, Taipei Medical College, Taipei, Taiwan, 5/1995

Invited Speaker, New Ligands for Cancer Imaging and Therapy Applications, Department of Nuclear Medicine, School of Medicine (Lecture at International Hotel, Tokyo, Japan, arranged by Dr. Endo), Gunma University, Maebashi, Japan, 5/1995

Invited Speaker, New Ligands for Cancer Imaging and Therapy Applications, Department of Nuclear Medicine, Seoul National University Hospital, Seoul, Korea, 5/1995

Invited Speaker, (1) New ligands for metabolic imaging in oncology; (2) Metabolic Imaging & Targeted Delivery of Anticancer Agents in Oncology, Atomic Energy Council, Lung-Tan, Taiwan, ROC, Institute of Nuclear Energy Research, Taiwan, 9/1996

Invited Speaker, (1) Biodegradable polymers for drug delivery; (2) New ligands for metabolic imaging in oncology; (3) Metabolic Imaging & Targeted Delivery of Anticancer Agents in Oncology, Department of Nuclear Medicine, National Cheng Kung University Hospital, Tainan, Taiwan, 9/1996

Invited Speaker, Metabolic Imaging & Targeted Delivery of Anticancer Agents in Oncology, National PET/Cyclotron Center, Taipei Veterans General Hospital, Taipei, Taiwan, 9/1996

Invited Speaker, Metabolic Imaging & Targeted Delivery of Anticancer Agents in Oncology, Department of Obstetrics & Gynecology, Taipei Medical College, Taipei, Taiwan, 9/1996

Invited Speaker, Metabolic Imaging & Targeted Delivery of Anticancer Agents in Oncology, Department of Nuclear Medicine, School of Medicine, Gunma University, Maebashi, Japan, 9/1996

Invited Speaker, Targeted Delivery of Anticancer Agents in Oncology, Department of Nuclear Medicine, Seoul National University Hospital, Seoul, Korea, 12/1996

Invited Speaker, Polymeric Drug Delivery in Oncology, Department of Nuclear Medicine, School of Medicine & Hospital, Wonkwang University, Iksan, Korea, 12/1996

Invited Speaker, Microencapsulation, Department of Nuclear Medicine, National ChengKung University Hospital, Tainan, Taiwan, 12/1996

Invited Speaker, Molecular Nuclear Medicine, Department of Nuclear Medicine, Dubai Hospital, Dubai, United Arab Emirates, 12/1997

Invited Speaker, Estrogen receptors as target for breast cancer imaging. American Cancer Society, The Schilling Research Conference, Santa Cruz, CA, 9/1997

Invited Speaker, Targeted molecular imaging in oncology. Taiwan Society of Nuclear Medicine, Taiwan. 11/2000

Invited Speaker, Targeted molecular imaging in oncology, Department of Obstetrics & Gynecology, Taipei Medical University, Taiwan, 11/2000

Invited Speaker, Radionuclide therapy, Institute of Nuclear Energy Research, Taipei, Taiwan, 11/2000

Invited Speaker, Tissue specific disease targeted imaging, Department of Nuclear Medicine, School of Medicine, Gunma University, Maebashi, Japan, 11/2000

Invited Speaker, Targeted molecular imaging in oncology, Daiichi Radioisotope Laboratories, Ltd., Tokyo, Japan, 11/2000

Invited Speaker, Targeted molecular imaging in oncology. Division of Nuclear Medicine, Tohoku University, Sendai, Japan, 12/2000

Invited Speaker, Nuclear imaging of apoptosis, 19<sup>th</sup> Annual Conference on Houston Conference on Biomedical Engineering Research, sponsored by Society for Engineering in Medicine and Biology, University of Houston Hilton Hotel, Houston, Texas, 2/2001.

Invited Speaker, Nuclear imaging of angiogenesis and apoptosis, Department of Nuclear Medicine, National ChengKung University Hospital, Tainan, Taiwan, 2/2001.

Invited Speaker, Targeted molecular imaging in lung cancer. Division of Radiation Oncology, 9<sup>th</sup> Radiation Workshop at Round Top, "New Horizons in the Treatment of Non-Small Cell Lung Cancer" Round Top, Texas, 3/2001.

Invited Speaker, Tumor vascular targeted imaging with radiolabeled antiangiogenic agents. On Categorical Seminar course title: "Angiogenesis: Basic Principles and Potential Opportunities", 48<sup>th</sup> Annual Meeting of the Society of Nuclear Medicine, Toronto, Canada, 6/2001.

Invited Speaker, Angiogenesis, Institute of Nuclear Energy Research, Taipei, Taiwan, 3/2001.

Invited Speaker, Angiogenesis targets and nuclear imaging. 47<sup>th</sup> annual meeting of the Southwestern Chapter Society of Nuclear Medicine, Galveston, TX, 3/2002.

Invited Speaker, Lecture Title: "Mechanism-based cellular targeted imaging in oncology" (Organized by Anzai Medical Company, Tokyo, Japan), Shanghai Nuclear Medicine Physicians, Shanghai Hotel and Taiwan Society of Nuclear Medicine January Meeting, Taipei Veteran General Hospital, 1/2003

Invited Speaker, Molecular Chemistry and Target Assessment, Department of Nuclear Medicine, Yokohama University, Yokohama, Japan, 3/2003.

Invited Speaker, Future molecular imaging agents for diagnosis and treatment in oncology, 50<sup>th</sup> Annual Meeting of the Society of Nuclear Medicine, Philips Users' Meeting, New Orleans, LA, 6/2003.

Visiting Scholar, Mechanism-based cellular targeted imaging-guided therapy in oncology, Department of Pharmacology, Marshall University, School of Medicine, Huntington, W, 10/2003.

Invited Speaker, Mechanism Directed Generator-Produced Agents for Molecular Targeted Imaging, Institute of Biomedical Sciences Academia Sinica, Taipei, Taiwan, 3/2004.

Invited Speaker, Mechanism-based new PET Agents, 49<sup>th</sup> annual meeting of the Southwestern Chapter Society of Nuclear Medicine, Austin, TX, 4/2004.

Invited Speaker, Generator-Produced Agents for Molecular Targeted Imaging, at the Hypoxia Imaging Techniques Meeting (organized by National Cancer Institute), Arizona Golf Resort and Conference Center, Mesa, AZ, 4/2004.

Invited Speaker, Generator-Produced Agents for Molecular Targeted Imaging, 12<sup>th</sup> Annual Radiation Workshop (Advances in Imaging-guided Diagnosis and Therapy), Round Top, TX, 4/2004.

Invited Speaker, Imaging molecular signatures by PET and SPECT, The National Cancer Center, Tokyo, Japan, 5/2004.

Invited Speaker, Glycopeptide: compositions, methods of manufacturing and biomaterial applications, Department of Fine Chemicals, Taiwan HOPAX Chems, MFG, Co., Ltd., Kaohsiung, Taiwan, 10/2004.

Invited Speaker, Role of RDRC: from bench to clinic, Department of Nuclear Medicine, Yokohama University, Yokohama, Japan, 10/2004.

Invited Speaker, New Raiopharmaceuticals beyond FDG, 8<sup>th</sup> Asia Oceania Congress of Nuclear Medicine and Biology, Beijing, China, 10/2004.

Invited Speaker, Targeted imaging and drug delivery, Department of Fine Chemicals, Taiwan HOPAX Chems, MFG, Co., Ltd., Kaohsiung, Taiwan, 3/2005.

Invited Speaker, Targeted molecular imaging in oncology, Department of Radiology, Mackay Hospital, Taipei, Taiwan, 3/2005.

Invited Speaker, Bench to clinic development of PET Radiopharmaceuticals, at the Department of Nuclear Medicine, National Taiwan University Hospital, Taipei, Taiwan, 3/2005.

Invited Speaker, Tracer development and hybrid imaging, Philips Medical System at Joint Meeting of the Austrian, German and Swiss Societies of Nuclear Medicine ("DGN"), Basel, Switzerland, 4/2005.

Invited Speaker, <sup>68</sup>Ga-Tracer Development for PET/CT, Daiichi Radiopharmaceutical Laboratories, Tokyo, Japan, 5/2005.

Invited Speaker, RDRC, Phase 0 and Exploratory IND in Nuclear Medicine. Japanese Society of Nuclear Medicine Morals Meeting at Ruby Hole (Daimaru Department Store) Yokohama University, Yokohama, Japan, 5/2005.

Invited Speaker, Technologies for Tasrgeted Molecular Imaging, at the Department of Nuclear Medicine, National Cheng-Kung University Hospital, Tainan, Taiwan, 8/2005.

Invited Speaker, Novel Tracers beyond FDG in Molecular Imaging of Brain Disease, at the Department of Nuclear Medicine, National Taiwan University Hospital, Taipei, Taiwan, 10/4/2005 (organized by Dr. Kai-Yuan Tzen and GE Medical System).

Invited Speaker, Novel tracers beyond FDG for image-guided therapy applications., 2005 Small Animal Imaging Symposium, at the Department of Nuclear Medicine, Chang-Gunn University Hospital, Taipei, Taiwan, 11/12/2005 (organized by Dr. Dorothy Yen).

Invited Speaker, Current status of diagnostic and therapeutic radiopharmaceuticals' development in US, at the Institute of Nuclear Energy Research, Taipei, Taiwan, 11/11/2005.

Invited Speaker, Molecular Targeted Imaging and Therapy in Ovarian Cancer, at 1<sup>st</sup> Annual Meeting of Asian Gynecologic Oncology Group, Chang-Gunn University Hospital, Taipei, Taiwan, 11/15/2005 (organized by Drs. Dorothy Yen, Sherry C-H Lai).

### **BIBLIOGRAPHY**

### PUBLISHED ARTICLES IN REFERRED JOURNALS

- 1. Bourn WM, Yang DJ, Davisson JN. Effects of ketamine enantiomers on sound-induced convulsions in epilepsy prone rats. J Pharmacol Res Commun 1983;15(9): 815-824.
- 2. Hatfield GM, Yang DJ, Ferguson PW, Keller WJ. Identification of toxic alkaloids from the calcaratus subspecies of Lupinus Arbustus. J Agric Food Chem. 1985;33(5): 909-912.
- 3. Yang DJ, Davisson JN. Aminotetraline analogs of ketamine; synthesis and evaluation of hypnotic and locomotor properties in mice. J Med Chem. 1985;28(9): 1361-1365.
- 4. Rankin GO, Yang DJ, Cressey-Veneziano K, Brown PI. N-(3,5-Dichloro-phenyl)succinimide nephrotoxicity in the Fischer 344 rat. Toxicology Lett. 1985;24: 99-105.
- 5. Rankin GO, Cressey-Veneziano K, Yang D J, Wang RT, Brown, PI. In vivo and in vitro effects of azaconazole on renal function in the Fischer 344 rat. Toxicology 1985;34: 1-11.
- 6. Rankin GO, Yang DJ, Cressey-Veneziano K, Brown PI. Acute nephrotoxicity of N-phenyl and N-(monochlorophenyl) succinimides in Fischer 344 and Sprague-Dawley rats. Toxicology 1985;34: 299-308.
- 7. Yang DJ, Lahoda EP, Brown P I, Rankin GO. Structure nephrotoxicity relationships for parasubstituted N-phenylsuccinimides in Fischer 344 and Sprague-Dawley rats. Toxicology 1985;36: 23-35.
- 8. Yang DJ, Lahoda EP, Brown P I, Rankin GO. Acute nephrotoxicity of isomeric N-(dichlorophenyl)succinimides in Fischer 344 and Sprague-Dawley rats. Fundam. Appl. Toxicol. 1985;5: 1119-1127.
- 9. **Yang DJ**, Rankin GO. Nephrotoxicity of antifungal agents. Adverse Drug Reactions and Acute Poisoning Rev. 1985; 1: 37-49.

10. Yang DJ, Richmond CD, Teets VJ, Brown PI, Rankin GO. Effect of succinimide ring modification on N-(3,5-dichlorophenyl) succinimide-induced nephrotoxicity in Sprague-Dawley and Fischer 344 rats. Toxicology 1985;37: 65-77.

- 11. Rankin GO, Yang DJ, Cressey-Veneziano K, Casto S, Wang RT, Brown PI. In vivo and in vitro nephrotoxicity of aniline and its monochlorophenyl derivatives in the Fischer 344 rat. Toxicology 1986;38: 269-283.
- 12. Rankin GO, **Yang DJ**, Teets VJ, Lo HH, Brown PI. 3,5-Dichloroaniline-induced nephrotoxicity in the Sprague-Dawley rat. Toxicology Lett. 1986;30: 173-179.
- 13. Rankin GO, Yang DJ, Teets VJ, Brown PI. Deuterium isotope effect in acute N-(3,5-dichlorophenyl)-succinimide-induced nephrotoxicity. Life Sci. 1986;39: 1291-1299.
- 14. Yang DJ, Lahoda EP, Brown PI, Rankin GO. Acute N-(3,4,5-trichlorophenyl) succinimide-induced nephrotoxicity in Sprague-Dawley and Fischer 344 rats. Toxicology Lett. 1986;31: 219-228.
- 15. Rankin GO, Yang DJ, Teets V, Lo HH, Brown PI. The effect of probenecid on acute N-(3,5-dichlorophenyl)succinimide-induced nephrotoxicity in the Fischer 344 rat. Toxicology 1987;44: 181-192.
- 16. Yang DJ, Teets VJ, Bolton B, Brown PI, Rankin GO. Role of glutathione in acute N-(3,5-dichlorophenyl)succinimide-induced nephrotoxicity in Sprague-Dawley and Fischer 344 rats. Toxicology 1987;45: 25-44.
- 17. **Yang DJ,** Lo HH, Teets VJ, Brown PI, Rankin GO. Nephrotoxicity of N-(3,5-dihalophenyl) succinimides in Fischer 344 rats. J. Toxicol. Env Health 1987;20: 333-346.
- 18. Yang DJ, Brown PI, Lo HH, Teets VJ, Rankin GO. Structure-nephrotoxicity relationships for metasubstituted N-phenylsuccinimides. J Appl Toxicol. 1987;7(3): 153-160.
- 19. Rankin GO, Yang DJ, Richmond CD, Teets VJ, Wang RT, Brown PI. Effect of microsomal enzyme activity modulation on N-(3,5-dichlorophenyl)succinimide-induced nephrotoxicity. Toxicology 1987;45: 269-289, 1987.
- 20. Lo HH, Teets VJ, Yang DJ, Brown PI, Rankin GO. Acetone effects on N-(3,5-dichlorophenyl)succinimide-induced nephrotoxicity. Toxicology Lett. 1987;38: 161-168.
- 21. Valentovic MA, Elliott C, Teets VJ, Brown PI, Yang DJ, Rankin GO. Enzyme induction produced by N-(3,5-dichlorophenyl)succinimide in rats. Biochem Pharmacol. 1988;37(4): 768-770.
- 22. Rankin GO, Shih HC, **Yang DJ**, Teets VJ, Brown PI. Acute nephrotoxicity of N-(3,5-dichlorophenyl)succinimide metabolites in Fischer 344 rats. Toxicol Appl Pharmacol. 1988;96: 405-16.
- 23. Wieland DM, Kilbourn MR, Yang DJ, Laborde E, Gildersleeve DL, Van Dort ME, Pira J-L, Ciliax BJ, Young AB. NMDA receptor channels: labeling of MK-801 with ioiodine-125 and fluorine-18. Int J Appl Radiat Isot. 1988;39(12): 1219-1225.
- 24. Yang DJ, Ciliax B, Van Dort M, Gildersleeve D, Pirat J-L, Young AB, Wieland DM. Synthesis and receptor binding studies of (I)1-iodo-Mk-801. Pharm. Res. 1989;6(6): 474-476.

25. Yang DJ, Wallace S, Tansey W, Wright KC, Kuang L-R, Tilbury RS, Diego I, Lim J-L, Emran AM, Kim EE. Synthesis and in vitro receptor binding studies of fluorotamoxifen analogues. Pharm. Res. 1991;8(2): 174-177.

- 26. Rankin GO, Shih H-C, Teets VJ, Yang DJ, Nicoll DW, Brown PI. N-(3,5-Dichlorophenyl) succinimide nephrotoxicity: Evidence against the formation of nephrotoxic glutathione or cysteine conjugates. Toxicology 1991;68: 307-325.
- 27. Yang DJ, Tewson T, Tansey W, Kuang L-R, Reger G, Cherif A., Wright K, Moult R, Tilbury RS, Kim EE, Wallace S. Halogenated analogs of tamoxifen: synthesis, receptor assay and inhibition of MCF7 cells. J Pharm Sci. 1992;81: 622-625.
- 28. Yang DJ, Cherif A, Tansey W, Kuang L-R, Wright KC, Li C, Kim EE, Wallace S. N,N-diethylfluoromethyltamoxifen: synthesis assignment of <sup>1</sup>H and <sup>13</sup>C spectra and receptor assay. Eur J Medicinal Chem. 1992;27: 919-924.
- 29. Kim EE, Haynie TP, Cho B-J, Tilbury RS, Yung WKA, Chung S-K, Kim C-G, Podoloff DA, Yang DJ, Moser RP, Ajani JA. Differentiation of residual or recurrent tumors from post-treatment changes with <sup>18</sup>F-FDG PET. Radiographics, 1992;12: 269-279.
- 30. Li C, Yang DJ, Kuang L-R, Wallace S. Polyamino acid microspheres: preparation, characterization and distribution after intravenous injection in rats. Int'l J Pharm. 1993;94: 143-152.
- 31. Yang DJ, Kuang L-R, Cherif A, Tansey W, Li C, Lin WJ, Liu C-W, Kim EE, Wallace S. Synthesis of <sup>18</sup>F-alanine and <sup>18</sup>F-tamoxifen for breast tumor imaging. J Drug Targeting 1993;1: 259-267.
- 32. Rankin GO, **Yang DJ**, Shih HC, Hubbard JL. Synthesis and toxicity of C- and N-arylsuccinimides. Trends in Heterocyclic Chemistry 1993;3: 83-93.
- 33. Yang DJ, Li C, Nikiforow S, Gretzer MB, Lopez MS, Kuang L-R, Vargas K, Wallace S. Poly(benzyl-l-glutamate): Diagnostic and therapeutic potential. J Pharm Sci. 1994;88(3): 328-331.
- 34. Cherif A, Yang, Tansey W, Kim EE, Wallace S. Rapid synthesis of 3-[<sup>18</sup>F]fluoro-1-(2'-nitro-1'-imidazolyl)-2-propanol(<sup>18</sup>F-fluoromisonidazole). Pharm. Res. 1994;11(3): 466-469.
- 35. Yang DJ, Li C, Kuang L-R, Tansey W, Cherif A, Price J, Buzdar A, Gretzer M, Kim EE, Wallace S. Imaging, biodistribution and therapy potential of halogenated tamoxifen analogues. Life Sci. 1994;55(1): 53-67.
- 36. Li C, Yang DJ, Nikiforow S, Tansey W, Kuang L-R, Wright KC, Wallace S. Formation and characterization of cisplatin-loaded poly(benzyl-l-glutamate) microspheres for chemoembolization. Pharm Res. 1994;11(12): 1792-1799.
- 37. Yang DJ, Kuang L-R, Li C, Wallace S. CT liver enhancement imaging studies using poly(d-l-lactide) microcapsules. Invest Radiol. 1994;29(S2): S267-S270.
- 38. Li C, McCusky P, Kan Z, Yang DJ, Wallace S. In vivo and electron microscopic studies of rat liver after intravenous injection of polyamino acid microspheres. J Biomed Materials Res. 1994;28: 881-890.

39. Li C, Kan Z-X, Yang DJ, McCuskey P, Kuang L-R, Chun W-L, Wright KC, Wallace S. Preparation, characterization, and evaluation of ioxilan carbonate particles for computed tomography contrast enhancement of liver. Invest Radiology 1994;29(11): 1006-1013.

- 40. Yang DJ, Wallace S, Cherif A, Li C, Gretzer MB, Kim EE, Podoloff DA. Development of F-18-labeled fluoroerythronitroimidazole as a PET agent for imaging tumor hypoxia. Radiology 1995;194: 795-800.
- 41. Inoue T, Kim EE, Ritsuko K, Wong FCL, Bassa P, Wong W-H, Yang DJ, Endo K, Podoloff DA.

  Detection of recurrent or residual lung cancer by positron emission tomography using 2-[<sup>18</sup>F]fluoro-2-deoxy-D-glucose. J Nucl Med. 1995;36: 788-793.
- 42. Inoue T, Kim EE, Wallace S, Yang DJ, Wong FCL, Bassa P, Cherif A, Delpassand E, Buzdar A, Podoloff DA. Positron emission tomography using [<sup>18</sup>F]fluorotamoxifen to evaluate therapeutic responses in patients with breast cancer: preliminary study. Cancer Biotherapy and Radiopharm. 1996;11(4): 235-245.
- 43. Inoue T, Yang DJ, Cherif A, Tansey W, Kim EE, Hunter N, Milross CG, Milas L, Wallace S, Podoloff DA. Evaluation of [131]iodoerythronitroimidazole as a marker a predictor for radiosensitizing effect. Anti-Cancer Drugs 1996;7: 856-865.
- 44. Delpassand ES, Yang DJ, Wallace S, Cherif A, Quadri SM, Joubert A, Inoue T, Podoloff DA. Synthesis, biodistribution and estrogen receptor scintigraphy of an <sup>111</sup>In-DTPA-tamoxifen analogue. J Pharm Sci 1996;85(6): 553-559.
- 45. Cherif A, Wallace S, Yang DJ, Newman R, Wilson V, Nornoo A, Inoue T, Kim C, Kuang L-R, Kim EE, Podoloff DA. Development of new markers for hypoxic cells: [131]iodomisonidazole and [131]iodoerythronitroimidazole. J Drug Targeting 1996;4: 31-39.
- 46. Tewson TJ, Yang DJ, Wong G, Macy D, DeJesus OJ, Nickles RJ, Perlman SB, Taylor M, Frank P. The synthesis of fluorine-18 lomefloxacin and its preliminary use in human studies. Int J Nucl Med Biology 1996;23: 767-772.
- 47. Bassa P, Kim EE, Inoue T, Wong FCL, Yang DJ, Wong W-H, Hicks KW, Buzdar AU, Podoloff DA. Evaluation of preoperative chemotherapy using positron emission tomography with [18F]fluorodeoxyglucose in breast cancer. J Nucl Med. 1996;37(6): 931-937.
- 48. Kim CG, Yang DJ, Kim EE, Cherif A, Kuang L-R, Li C, Tansey W, Liu CW, Li SC, Wallace S, Podoloff DA. Assessment of tumor cell proliferation using [<sup>18</sup>F]fluorodeoxyadenosine and [<sup>18</sup>F]fluoroethyluracil. J Pharm Sci. 1996;85(3): 339-344.
- 49. Kuang L-R, Yang DJ, Inoue T, Liu WC, Wallace S, Wright KC. Percutaneous intratumoral injection of cisplatin microspheres in tumor-bearing rats: to diminish acute nephrotoxicity. Anti-Cancer Drugs 1996;7: 220-227.
- 50. Inoue T, Kim EE, Wong FCL, Yang DJ, Bassa P, Wong W-H, Tansey W, Hicks K, Podoloff DA. Comparison of fluorine-18-fluorodeoxyglucose and carbon-11 methonine PET in detection of malignant tumors. J Nucl Med. 1996;37(9): 1472-1476.

51. Wallace S, Ajani JA, Charnsangavej C, DuBrow R, Yang DJ, Chuang VP, Carrasco CH, Dodd GD. Carcinoid tumors: imaging procedures and interventional radiology. World J Surg. 1996;20: 147-156.

- 52. Li C, Yu D-F, Kan Z-X, Yang DJ, Tansey W, Kuang L-R, Wallace S. Biodistribution of cyclic carbonate of ioxilan: a novel radiopaque particulate macrophage imaging agent. Acad. Radiology 1996;3: 500-506.
- 53. Li C, Yu D-F, Inoue T, Yang DJ, Milas L, Hunter NR, Kim EE, Wallace S. Synthesis and evaluation of water-soluble polyethylene glycol paclitaxel conjugate as a paclitxel prodrug. Anti-Cancer Drugs 1996;7: 642-648.
- 54. Garcia JR, Kim EE, Wong FCL, Korkmaz M, Wong W-H, Yang DJ, Podoloff DA. Comparison of fluorine-18-FDG PET and technetium-99m-MIBI SPECT in evluation of musculoskeletal sarcomas. J Nucl Med. 1996;37(9): 1476-1479.
- 55. Yeh S-H, Liu R-S, Wu L-C, Yang DJ, Yen H-S, Chang C-W, Yu T-W, Chou K-L, Chen KY. Fluorine-18 fluoromisonidazole tumour to muscle retention ratio for the detection of hypoxia in nasopharyngeal carcinoma. Eur J Nucl Med. 1996;23: 1378-1383.
- 56. Tomiyoshi K, Amed K, Sarwar M, Higuchi T, Inoue T, Endo K, Yang DJ. Synthesis of isomers of <sup>18</sup>F-labelled amino acid radiopharmaceutical: Position 2- and 3-L-<sup>18</sup>F-∞-methyltyrosine using a separation and purification system. Nucl Med Comm. 1997;18: 169-175.
- 57. Yang DJ, Kuang L-R, Cherif A, Inoue T, Wright KC, Tansey W, Wallace S, Kim EE, Podoloff DA. Evaluation of intratumoral injection of poly(d, 1-lactide) cisplatin microspheres in rats with breast tumors using [131] iodomisonidazole (IMISO). Drug Delivery 1997;4: 107-113.
- 58. Inoue T, Kim EE, Wallace S, Yang DJ, Wong FCL, Bassa P, Buzdar A, Podoloff DA. Preliminary study of cardiac accumulation of [<sup>18</sup>F]fluorotamoxifen in patients with breast cancer. Clin Imaging 1997;21: 332-336.
- 59. Li C, Yu D-F, Inoue T, Yang DJ, Tansey W, Liu C-W, Milas L, Hunter NR, Kim EE, Wallace S. Synthesis, biodistribution and imaging properties of indium-111-DTPA-paclitaxel in mice bearing mammary tumors. J Nucl Med. 1997;38(7): 1042-1047.
- 60. Ilgan S, **Yang DJ**, Higuchi T, Zareneyrizi F, Kim EE, Podoloff DA. Imaging tumor folate receptors using <sup>111</sup>In-DTPA-methotrexate. Cancer Biotherapy and Radiopharm. 1998; *13*(3): 177-184.
- 61. Ilgan S, **Yang DJ**, Higuchi T, Zareneyrizi F, Bayhan H, Yu D-F, Kim EE, Podoloff DA. <sup>99m</sup>Tc-Ethylenedicysteine-Folate: A new tumor imaging agent. Synthesis, labeling and evaluation in animals. Cancer Biotherapy and Radiopharm. 1998;13(6): 427-435.
- 62. Diamandidou E, Ajani JA, Yang DJ, Chuang VP, Brown CA, Carrasco HC, Lawrence DD, Wallace S. Two-phase study of hepatic artery vascular occlusion with microencapsulated cisplatin in patients with liver metastases from neuroendocrine tumors. Am J Roentgenol (AJR). 1998;170(2):339-44.
- 63. Higuchi T, Yang DJ, Ilgan S, Tansey LW, Zareneyrizi F, Inoue T, Endo K, Kim EE, Podoloff DA. Biodistribution and scintigraphy of <sup>111</sup>In-DTPA-adriamycin in mammary tumor-bearing rats. Anti-Cancer Drugs 1999; *10*:89-95.

64. Tomiyoshi K, Inoue T, Higuchi T, Amed K, Sarwar M, Alyafei S, Zhang H, Matsubara K, Endo K, Yang DJ. Metabolic studies of <sup>18</sup>F-∞-methyltyrosine in mice bearing colorectal carcinoma LS-180. Anti-Cancer Drugs 1999;10:329-336.

- 65. Yang DJ, Ilgan S, Higuchi T, Zareneyrizi F, Oh C-S, Liu C-W, Kim EE, Podoloff DA. Noninvasive assessment of tumor hypoxia with <sup>99m</sup>Tc-labeled metronidazole. Pharm Res. 1999;16(5): 743-750.
- 66. Inoue T, Li C, Yang DJ, Higuchi T, Oriuchi N, Yu D-F, Milas L, Hunter N, Wallace S, Kim EE, Podloff DA. Evaluation of In-111 DTPA-paclitaxel scintigraphy to predict response on murine tumors to paclitaxel. Annals Nucl Med. 1999;13(3): 169-174.
- 67. Currie LM, Lichtiger B, Livesey SA, Tansey W, Yang DJ, Connor J. Enhanced circulatory parameters of human platelets cryopreserved with second messenger effectors: an in vivo study of 16 volunteer platelet donors. British J Haematology 1999;105(3): 826-831.
- 68. Zareneyrizi F, Yang DJ, Oh C-S, Ilgan S, Yu D-F, Tansey W, Liu C-W, Kim EE, Podoloff DA. Synthesis of <sup>99m</sup>Tc-ethylenedicysteine-colchicine for evaluation of antiangiogenic efffect. Anti-Cancer Drugs 1999;10: 685-692.
- 69. Yang DJ, Azhdarinia A, Wu P, Yu D-F, Tansey W, Kohanim S, Kim EE, Pdoloff DA. In Vivo and In Vitro Measurement of Apoptosis in Breast Cancer Cells Using <sup>99m</sup>Tc-EC- Annexin V. Cancer Biotherapy and Radiopharmaceuticals 2001;16(1):73-84.
- 70. Jeng W-M, Yang DJ, Huang S. An Inter-iteration parallel algorithm for PET image reconstruction. Ann Nucl Med Sci. 2001;14:173-181.
- 71. Yang DJ, Kim K-D, Schechter NR, Yu D-F, Wu P, Azhdarinia A, Roach JS, Kohanim S, Ozaki K, Fogler WE, Bryant JL, Herbst RS, Abbruzzes J, Kim EE, Podoloff DA. Assessment of Antiangiogenic Effect Using 99mTc-EC-Endostatin. Cancer Biotherapy and Radiopharmaceuticals 2002;17(2): 233-246.
- 72. Andreopoulos D, Kasi LP, Asimacopoulos PJ, Jhingran SG, Cole W, Yang DJ, Kim EE. Selective in vitro labeling of white blood cells using <sup>99m</sup>Tc-labeled liposomes. Nucl Med Biol. 2002;29(2):185-190.
- 73. Andreopoulos D, Kasi LP, Kim EE, Diaz M, Yang DJ, Asimacopoulos PJ. Detection of Acute Post-operative mediastinitis in mice using <sup>99m</sup>Tc-labeled liposomes. Investigative Radiology 2002;37(8):435-439.
- 74. Schechter NR, Yang DJ, Azhdarinia A, Kohanim S, Wendt R, Oh C-S, Hu M, Yu D-F, Bryant J, Ang KK, Forster KM, Kim EE, Podoloff DA. Assessment of EGF receptors with <sup>99m</sup>Tc-ethylenedicysteine-C225 monoclonal antibody. Anti-Cancer Drugs 2003;14: 49-56.
- 75. Yang DJ, Kim C-G, Schechter NR, Azhdarinia A, Yu D-F, Oh C-S, Bryant JL, Won JJ, Kim EE, Podoloff DA. Imaging with <sup>99m</sup>Tc-EC-DG Targeted at the Multifunctional Glucose Transport System: Feasibility study with rodents. Radiology 2003;226: 465-473.
- 76. Song H-C, Bom H-S, Cho K-H, Kim B-C, Seo J-J, Kim C-G, Yang DJ, Kim EE. Prognostication of recovery in patients with acute ischemic stroke using brain spect with <sup>99m</sup>Tc-labeled metronidazole. Stroke 2003;34(4):982-986.

77. Yang DJ, Bryant J, Chang JY, Mendez R, Oh C-S, Yu D-F, Ito M, Azhdarinia A, Kohanim S, Kim EE, Lin E, Podoloff DA. Assessment of COX-2 expression with <sup>99m</sup>Tc-labeled celebrex. Anti-Cancer Drugs 2004;15:255-263.

- 78. Yang DJ, Yukihiro M, Oh C-S, Kohanim S, Azhdarinia A, Yu D-F, Kim C-G, Ito M, Bryant JL, Kim EE, Podoloff DA. Assessment of Therapeutic Tumor Response Using <sup>99m</sup>Tc-Ethylenedicysteine-Glucosamine. Cancer Biotherapy and Radiopharm. 2004;19(4):444-458.
- 79. Yang DJ. Book Review. In Welch MJ, Redvanly CS. (eds) Handbook of Radiopharmacuticals: Radiochemistry and applications. New York, J Wiley. J Nucl Med 2004;45:1096-1097.
- 80. Schechter NR, Wendt RE, Yang DJ, Azhdarinia A, Erwin WD, Stachowiak AM, Broemeling LD, Kim EE, Cox JD, Podoloff DA, Ang KK. Radiation Dosimetry of <sup>99m</sup>Tc-labeled C225 in Patients with Squamous Cell Carcinoma of the Head and Neck. J Nucl Med 2004;45(10):1683-7.
- 81. Yang DJ, Ozaki K, Oh C-S, Azhdarinia A, Yang T, Ito M, Greenwell AC, Bryant JL, Kohanim S, Wong , Kim EE. Tc-EC-Guanine: Synthesis, Biodistribution and Tumor Imaging in Animals. Pharmaceutical Research 2005;22 (9): 1471-1479.
- 82. Yang DJ, Azhdarinia A, Kim EE. Tumor specific imaging using Tc-99m and Ga-68 labeled radiopharmaceuticals. Current Medical Imaging Reviews. 2005;1:25-34.
- 83. Azhdarinia A, Yang DJ, Yu D-F, Mendez R, Oh C-S, Kohanim S, Bryant J, Kim EE. Regional Radiochemotherapy Using In Situ Hydrogel. Pharmaceutical Research 2005;22(5):776-783.
- 84. Yang DJ, Kim EE. Tracer development and hybrid imaging. Eur J Nucl Med Mol Imaging. 2005;32(9):1001-2.
- 85. Yang DJ, Kim EE, Inoue T. Targeted Molecular Imaging in Oncology. Annals Nucl Med 2006;20(1):1-11.
- 86. Ito M, Yang DJ, Mawlawi O, Mendez R, Oh C-S, Azhdarinia A, Greenwell AC, Yu D-F, Kim EE. PET and planar imaging of tumor hypoxia with labeled metronidazole. Academic Radiology 2006;13(5):598-609.
- 87. Takahashi N, Yang DJ, Kohanim S, Oh C-S, Yu D-F, Azhdarinia A, Zhang X-C, Chang JY, Kim EE. Targeted functional imaging of estrogen receptors with <sup>99m</sup>Tc-GAP-EDL. Eur J Nucl Med Mol Imaging.2006 (in press)
- 88. Karacalioglu AO, Yang DJ, Azhdarinia A, Mendez R, Oh C-S, Kohanim S, Chanda M, Greenwell AC, Yu D-F, Kim EE. Radiolabeled L-lysine for tumor imaging. Academic Radiology 2006 (in press)
- 89. Gong J, Yang DJ, Kohanim S, Humphreys R, Broemeling L, Kurzrock R. Novel *in vivo* imaging demonstrates upregulation of death receptors by paclitaxel and correlates with enhanced antitumor effects of receptor agonist antibodies. Molecular Cancer Therapeutics 2006 (in press).

### **INVITED ARTICLES IN JOURNALS:**

1. Kim EE, Lamki L, Podoloff DA, Yang DJ. RSNA 1996 meeting notes: Nuclear Medicine. Radiology 1996; 198: 614-616.

2. Yang DJ, Yu D-F, Zareneyrizi F, Azhdarinia A, Ilgan S, Kim C-G, Suwaidi J-A, Zakko S, Kim EE. Molecular targets for cancer imaging and therapy applications. Ann Nucl Med Sci 2000;13:19-36.

3. Yang DJ. Book reviews. J Nucl Med. 2006;47(4):727.

### **BOOKS AND CHAPTERS:**

#### **BOOKS EDITED AND WRITTEN:**

Kim EE, Yang DJ. (eds), Targeted Molecular Imaging in Oncology, Heidelberg; Springer-Verlag, 2000.

### **BOOK CHAPTERS:**

- 1. Rankin GO, Yang DJ, Cressey-Veneziano K. Fungicide nephrotoxicity: Role of chlorine atoms in dimetachlone-induced acute nephrotoxicity in the Fischer 344 rat. In: Bach PH, Lock EA.(eds.), Renal Heterogeneity and Target Cell Toxicity, Proceedings of the 2nd International Symposium on Nephrotoxicity, John Wiley & Sons, Ltd., New York, pp. 215-218, 1985.
- 2. Van Dort ME, Yang DJ, Kilbourn MR, Gole DJ, Klair A, Young AB, Domino EF, Wieland DM. F-18-PCP analogs for positron emission tomography (PET). In: Domino EF, Kamenka JM. (eds.), Sigma and Phencyclidine-like Compounds as Molecular Probes in Biology. Proceedings of the 2nd French-US International Symposium on Phencyclidine-like Compounds as Molecular Probes in Biology, NPP Books, Ann Arbor, Michigan, pp. 727-739, 1988.
- 3. Rankin GO, Yang DJ, Teets VJ, Shih HC, Brown PI. Role of biotransformation in acute N-(3,5-dichlorophenyl) succinimide-induced nephrotoxicity. In: Bach PH, Lock EA. (eds.), Nephrotoxicity: Extrapolation from in vitro to in vivo, and animals to man, Plenum Publishing Corp., New York, pp. 601-606, 1989.
- 4. Yang DJ, Emran A, Tansey W, Wright KC, Kuang L-R, Reger G, Tilbury RS, Wallace S, Kim EE. Potential breast tumor imaging agents: Fluorotamoxifen and derivatives. In: Emran A.(ed.), New Trends in Radiopharmaceutical Synthesis, Quality Assurance and Regulatory Control, Plenum Publishing Corp., New York, pp. 67-78, 1991.
- 5. Yang DJ, Byun H-S, Kuang L-R, Yamashita Y, Moult B, Tansey W, Wright KC, Wallace S. Properties of biodegradable polymers for 5-Fluorouracil and Tamoxifen microcapsules. In: Benulic T, Sersa G, Kovac V.(eds.), Advances in Radiology and Oncology, Radiologia Iugoslavica, Slovenia, pp. 25-29, 1992.
- 6. Yang DJ, Kuang L-R, Li C, Tsai T, Liu C-W, Lin W, Tansey W, Nikiforow S, McCuskey P, Kan Z, Wright KC, Wallace S. Evaluation of Poly(d,l-lactide) encapsulated radiopaque microcapsules. In: Charpentier B, El-Nokaly M, Piatt D.(ed.), Polymeric Delivery Systems, American Chemical Society Symposium Series No. 520, New York, pp. 371-381, 1993.
- 7. Yang DJ, Wallace S, Kuang L-R, Li C, Cherif A, Kan Z, McCuskey P, and Wright KC. Microencapsulation, tamoxifen analogues and in vivo microscopy for tumor targeting. *In:* Banzet P, Holland JF, Khayat D, Weil M. (eds.), Cancer Treatment An Update, Springer-Verlag, Paris, pp. 817-819, 1994.

8. Yang DJ, Gretzer MB, Kuang L-R, Cherif A, Li C, Diaz MF, Liu C-W, Emran A, Tansey W, Wallace S. Radiolabeled tamoxifen analogues for imaging breast cancer with SPECT. *In:* Emran AM. (ed.), Chemists' View of Imaging Center, Plenum Publishing Corporation, New York, pp. 513-526, 1995.

- 9. Yang DJ, Ilgan S, Kim EE. Radiopharmaceuticals for Tumor Imaging and MRI Contrast Agents. *In*: Kim EE. (ed.), Molecular Imaging in Oncology: PET, MRI, MRS, Springer-Verlag, New York, pp. 81-100, 1999.
- 10. Yang DJ, Ilgan S, Kim EE. Principles of Basic Sciences Related to Cancer. *In*: Kim EE, Yang DJ (eds), Targeted Molecular Imaging in Oncology, Springer-Verlag, New York, pp. 1-13, 2000.
- 11. **Yang DJ,** Li C. Imaging of Anticancer Drugs, Response and Prognosis. *In*: Kim EE, Yang DJ (eds), Targeted Molecular Imaging in Oncology, Springer-Verlag, New York, pp. 185-199, 2000.
- 12. Kim EE, Yang DJ. Imaging of Apoptosis and Hypoxia. *In*: Kim EE, Yang DJ (eds), Targeted Molecular Imaging in Oncology, Springer-Verlag, New York, pp. 215-228, 2000.
- 13. Yang DJ, Inoue T. Radiopharmaceuticals for Tumor Targeted Imaging: Overview. *In*: Kim EE, Yang DJ (eds), Targeted Molecular Imaging in Oncology, Springer-Verlag, New York, pp 62-82, 2000.
- 14. **Yang DJ**, Kim EE. Imaging of Signal Transduction in Cancer. *In*: Kim EE, Yang DJ (eds), Targeted Molecular Imaging in Oncology, Springer-Verlag, New York, pp.229-244, 2000.
- 15. Oriuchi N, Yang DJ. Antibodies for Targeted Imaging: Properties and Radiolabeling. *In*: Kim EE, Yang DJ (eds), Targeted Molecular Imaging in Oncology, Springer-Verlag, New York, pp.83-87, 2000.
- 16. Azhdarinia A, Yang DJ, Schechter NR, Yu D-F, Bryant J, Kohanim S, Kim EE, Podoloff DA. <sup>99m</sup>Tc-EC-C225: An EGFR Targeting Tracer To Assess Angiogenesis. *In*: Nicolini M, Mazzi U. (eds), Technetium, Rhenium and other Metals in Chemistry and Nuclear Medicine, Servizi Grafici Editoriali snc, Padova, Italy, pp. 665-667, 2002.
- 17. Azhdarinia A, Yang DJ, Yukihiro M, Yu D-F, Bryant J, Kim EE, Podoloff DA. 99mTc-Labeled Endostatin and Angiostatin for Angiogenesis Imaging. *In*: Nicolini M, Mazzi U. (eds), Technetium, Rhenium and other Metals in Chemistry and Nuclear Medicine, Servizi Grafici Editoriali snc, Padova, Italy, pp. 387-389, 2002.
- 18. Yang DJ, Azhdarinia, A, Kim EE. Automated synthesis of pet radiopharmaceuticals. *In*: Kim EE, Lee M-C, Inoue T, Wong W.H.(eds), Clinical PET Principles and Applications, Springer-Verlag, New York, pp.92-111, 2004.
- 19. Yang DJ, Inoue T, Kim EE. Radiopharmaceuticals. . *In*: Kim EE, Lee M-C, Inoue T, Wong W.H.(eds), Clinical PET Principles and Applications, Springer-Verlag, New York, pp. 62-91, 2004.
- 20. Yang DJ, Kim EE. Molecular targeted imaging in oncology with radioscintigraphy. *In*: Padhani AR, Choyke PL.(eds), New Techniques in Oncologic Imaging, Taylor & Francis, New York, pp. 167-192, 2006.

### **ABSTRACTS:**

1. Yang DJ, Davisson JN. Synthesis of tetrahydronaphthylamines as potential CNS agent (I). Symposium of Annual Meeting of the American Pharmaceutical Association. Acad Pharm Sci. 1981;11(1): 77.

2. Yang DJ, Davisson JN. Synthesis of tetrahydronaphthylamines as potential CNS agent (II). Symposium of 33rd National Meeting of the American Pharmaceutical Association. Acad Pharm Sci. 1982;12(2): 148.

- 3. Bourn WM, Yang DJ, Davisson JN. Effect of ketamine enantiomers on sound induced convulsions in epilepsy prone rats. Symposium of 33rd. National Meeting of the American Pharmaceutical Association. Acad Pharm Sci. 1982;12(2): 168.
- 4. Hatfield GM, Valdes LJJ, Yang DJ, Keller WJ. Diverse alkaloids from the calcaratus subspecies of LUPINUS ARBUSTUS. Symposium of Annual Meeting of the American Pharmaceutical Association. Acad Pharm Sci. 1983; 13(1): 81.
- 5. Yang DJ, Hong S, Lai I, Davisson JN. Effects of cocaine, probenecid and deuteration upon ketamine hypnosis and metabolism. Symposium of 35th National Meeting of the American Pharmaceutical Association. Acad Pharm Sci. 1983;13(2): 173.
- 6. Yang DJ, Rankin GO, Cressey-Veneziano K. Acute nephrotoxicity of N-(dichlorophenyl) succinimides in the Sprague-Dawley rat. The Pharmacologist 1984;26(3): 233.
- 7. Yang DJ, Cressey-Veneziano K, Rankin GO. N-(3,5-dichlorophenyl)-succinimide nephrotoxicity in the Fischer 344 rats. Federation Proc. 1984;43(3): 364.
- 8. Rankin GO, Cressey-Veneziano K, Bailey M, Yang DJ, Brown PI. Acute nephrotoxicity of N-phenyl and N-(monochlorophenyl)succinimides in Fischer 344 and Sprague-Dawley rats. Federation Proc. 1984;43(3): 364.
- 9. Rankin GO, Yang DJ, Cressey-Veneziano K. Fungicide nephrotoxicity: Role of chlorine atoms in dimetachlone-induced acute nephrotoxicity in the Fischer 344 rat. 2nd International Symposium on Nephrotoxicity, Guildford, England. Human Toxicology 1984;3(5): 414.
- 10. Yang DJ, Rankin GO. Structure-nephrotoxicity relationships for para-substituted N-phenylsuccinimides in Fischer 344 and Sprague-Dawley rats. Federation Proc. 1985;44(3): 517.
- 11. Rankin GO, Yang DJ, Teets V, Richmond C. Effect of enzyme induction and inhibition on N-(3,5-dichlorophenyl)succinimide-induced nephrotoxicity in the Fischer 344 rat. Federation Proc. 1985;44(3): 720.
- 12. Rankin G O, Yang DJ, Teets VJ, Richmond CD. Effects of glutathione depletion on acute N-(3,5-dichlorophenyl)succinimide-induced nephrotoxicity in the Fischer 344 rat. The Pharmacologist 1985;27(3): 227.
- 13. Lo H-H, Yang DJ, Lahoda EP, Rankin GO. Acute N-(3,4,5-trichlorophenyl) succinimide induced nephrotoxicity in Sprague-Dawley and Fischer 344 rats. The Pharmacologist 1985;27(3): 227.
- 14. Yang DJ, Richmond CD, Teets VJ, Rankin GO. Effect of succinimide ring modification on N-(3,5-dichlorophenyl)succinimide-induced nephrotoxicity in Sprague-Dawley and Fischer 344 rats. The Pharmacologist 1985;27(3): 227.
- 15. Brown PI, Yang DJ, Rankin GO, Wang RT. Effect of microsomal enzyme induction on N-(3,5-dichlorophenyl)succinimide-induced nephrotoxicity. Symposium of 25th Annual Meeting of the Southern Society of Anatomists. Anat Record 1986;214(4): 448.

16. Lo HH, Brown PI, Wang RT, Yang DJ, Rankin GO. Renal histological effects of 3,5-dichloroanaline in the Fischer 344 rat. Symposium of 25th Annual Meeting of the Southern Society of Anatomists. Anat. Record 1986;214(4): 457.

- 17. Rankin GO, Yang DJ, Teets V, Wang RT, Brown PI. Effect of glutathione depletion on N-(3,5-dichlorophenyl)succinimide-induced changes in renal morphology. Symposium of 25th Annual Meeting of the Southern Society of Anatomists. Anat. Record 1986;214(4): 459-460.
- 18. Richmond CD, Rankin GO, Brown PI, Yang DJ, Wang RT. An election microsomal enzyme inhibition on N-(3,5-dichlorophenyl) succinimide induced nephropathy. Symposium of 25th Annual Meeting of the Southern Society of Anatomists. Anat. Record 1986;214(4): 460.
- 19. Valentovic MA, Elliott C, Yang DJ, Teets V, Rankin GO. Hepatic enzyme induction following pretreatment with the nephrotoxin N-(3,5-dichlorophenyl) succinimide (NDPS). Toxicologist 1986;6(1): 141.
- 20. Rankin GO, Yang DJ, Teets VJ, Lo HH, Brown PI. Effect of probenecid on acute N-(3,5-dichlorophenyl)succinimide (NDPS)-induced nephrotoxicity. Toxicologist 1986;6(1): 177.
- 21. Yang DJ, Teets V, Richmond C, Rankin GO. Effect of succinimide ring deuterium labeling on acute N-(3,5-dichlorophenyl)succinimides-induced nephrotoxicity. Federation Proc. 1986;45(3): 571.
- 22. Lo HH, Yang DJ, Teets VJ, Brown PI, Rankin GO. Renal effects of meta-substituted N-(monochlorophenyl) succinimides in Fischer 344 rats. Federation Proc. 1986;45(3): 345.
- 23. Richmond C, Yang DJ, Teets VJ, Rankin GO. In vitro effects of N-(3,5-dichlorophenyl)succinimide on organic ion uptake by rat renal cortex. Federation Proc. 1986;45(3): 345.
- 24. Rankin GO, Teets V, Yang DJ. Effect of cysteine conjugate betalyase inhibition on N-(3,5-chlorophenyl) succinimide-induced nephrotoxicity in the Fischer 344 rat. Federation Proc. 1986;45(3): 571.
- 25. Lo H H, Yang DJ, Teets VJ, Rankin GO. 3,5-Dichloroaniline-induced nephrotoxicity in the Sprague-Dawley rats. Proc. of the West Virginia Acad. of Sci. 1986;58(1): 6.
- 26. Yang DJ, Wang RT, Brown PI, Teets V, Rankin GO. Renal histological changes induced by N-(2,4-dichlorophenyl)succinimide in Sprague-Dawley and Fischer 344 rats. Anat. Record 1986;214(4): 467.
- 27. Lo HH, Yang DJ, Teets VJ, Richmond CD, Rankin GO. The effect of acetylation on 3,5-dichloroaniline-induced nephrotoxicity. The Pharmacologist 1986;28(3): 179.
- 28. Rankin GO, Yang DJ, Lo HH, Teets VJ. Comparison of halogen atom substitution in N-(3,5-dichlorophenyl)succinimide-induced nephrotoxicity. The Pharmacologist 1986;28(3): 180.
- 29. Rankin GO, Lo HH, Teets VJ, Yang DJ, Brown PI. Acetone effects on N-(3,5-dichlorophenyl)succinimide-induced nephrotoxicity. Toxicologist 1986;7(1): 271.
- 30. Rankin GO, Shih HC, Yang DJ, Teets VJ, Brown PI. Hydroxy-N-(3,5-dichlorophenyl)succinimide, a nephrotoxic metabolite of N-(3,5-dichlorophenyl) succinimide. Federation Proc. 1987;46(4): 1139.

- 31. Shih HC, Yang DJ, Rankin GO. Synthesis of potential nephrotoxic metabolites on N-(3,5-dichlorophenyl)succinimide. Pharm. Res. 1987;4(2): S20.
- 32. Rankin GO, Yang DJ, Teets VJ, Brown PI. N-(3,5-dichlorophenyl) malonamic acid, a nonnephrotoxic metabolite of N-(3,5-dichlorophenyl)-succinimide. The Pharmacologist 1987;29(3): 122.
- 33. Yang DJ, Ciliax BJ, Pirat J-L, Gildersleeve DL, Van Dort ME, Young AB, Wieland DM. Mapping glutamate receptor channels: syntheses and autoradiography of MK-801 analogs. J Nucl Med. 1988;29(5): 930.
- 34. Van Dort ME, Yang DJ, Kilbourn MR, Gole DJ, Klair A, Chu DC, Young AB, Domino EF, Wieland DM. F-18-PCP analogs for positron emission tomography (PET). Second U.S. French International Seminar on Sigma Opioid Phencyclidine-like compounds as Molecular Probes in Biology. June 29-July 2 University of Michigan, Ann Arbor, Michigan. Pharm Biochem and Behavior 1987;28: 146.
- 35. Van Dort ME, Yang DJ, Kilbourn MR, Gole DJ, Klair A, Domino EF, Young AB, Wieland DM. [F-18] PCP analogs for positron emission tomography (PET). The Society of Nuclear Medicine 35th Annual Meeting. June 14-17. J Nucl Med. 1988;29(5): 767.
- 36. Yang DJ, Wright KC, Wallace S, Tilbury RS, Emran AM, Kasi LP, Kim EE. Synthesis and evaluation of fluorotamoxifen. Pharm Res. 1989;6(9): 541.
- 37. Yang DJ, Emran A, Tansey W, Tilbury RS, Kasi LP, Wright KC, Kuang L-R, Wallace S, Kim EE. Radiosynthesis of fluorotamoxifen analogs. J Nucl Med. 1990;31(5): 903.
- 38. Kuang L-R, Byun HS, Yang DJ, Wright KC, Tansey W, Wallace S. In vitro sustained release properties of biodegradable microcapsules loaded with 5-FU and tamoxifen. Pharm Res. 1990;7(9): 162.
- 39. Yang DJ, Wallace S, Wright K, Tansey W, Kuang L-R, Emran A, Kim EE. Tamoxifen Analogs: synthesis and receptor binding. Pharm Res. 1990;7(9): 65.
- 40. Yang DJ, Emran A, Tansey LW, Tilbury RS, Kuang L-R, Wright KC, Wallace S, Kim EE. Potential breast tumor imaging agent: fluorotamoxifen and derivatives. Chemical and Engineering News, July 9, 1990.
- 41. Tansey LW, **Yang DJ**, Kuang L-R, Cherif A, Emran A, Tilbury RS, Wallace S, Kim EE. Halogenated Tamoxifen: synthesis and evaluation. J Nucl Med. 1991;32(5): 1093.
- 42. Yang DJ, Kuang L-R, Tansey W, Moult R, Tilbury R, Kim EE, Wallace S. Halogenated Tamoxifens: in vivo and in vitro evaluation. 77th Scientific Assembly and Annual Meeting of RSNA, Chicago, Illinois, December 1-6, 1991. Radiology 1991;181(P): 267.
- 43. Yang DJ, Vargas K, Kuang L-R, Tansey W, Chu K, Li C, Wong W-H, Kim EE, Wallace S. Evaluation of halomethylated analogs of tamoxifen. Sixth Annual Meeting of American Association of Pharmaceutical Scientists. Pharm Res. 1991;8(10): S78.
- 44. Kim EE, Haynie TP, Podoloff DA, Tilbury RS, Yang DJ, Yung A,. Levin V, Moser R., Burner J. Correlation of F-18 FDG-PET and histologic findings in the detection of recurrent brain tumors. J Nucl Med. 1991;32(5): 932.

45. Kuang L-R, Yang DJ, Sagaguchi H, Moult R, Li C, Wallace S. In vivo tissue distribution studies of poly-d,l-lactide microcapsules loaded with ethyliopanoate. Sixth Annual Meeting of AAPS. Pharm Res. 1991;8(10): S150.

- 46. Kim EE, Haynie TP, Wong WH, Yang DJ, Tilbury RS, Podoloff DA. PET of breast cancer with <sup>18</sup>F-fluorodeoxyglucose. Radiology 1991;181(P): 102.
- 47. EE, Haynie TP, Wong WH, Yang DJ, Tilbury RS, Podoloff DA. Use of PET with <sup>18</sup>F-Fluorodeoxyglucose in differentiation of recurrent brain tumors and posttreatment changes. Radiology 1991;181(P): 90.
- 48. Yang DJ, Wong WH, Tansey W, Vargas K, Tilbury R, Broussard W, Kuang L-R, Wallace S, Kim EE. [18F]Fluoro analog of tamoxifen: radiosynthesis and imaging of estrogen receptors with PET. J Nucl Med. 1992;33(5): 985.
- 49. Kim EE, Kim BT, Haynie TP, Podoloff DA, Wong WH, Yang DJ, Tilbury RS, Hortobagyi G, Singletary E. Evaluation of preoperative chemotherapy in patients with locoregionally advanced breast cancer using <sup>18</sup>F-FDG PET. J Nucl Med. 1992;33(5): 828.
- 50. Li C, Kuang L-R, Yang DJ, McCuskey P, Wallace S. Poly(hydroxypropyl l-glutamate) microspheres: potential targeting carriers. Proceed. Intern. Symp. Control Rel Bioact Mater. 1992;19: 389-390.
- 51. Kim EE, Podoloff DA, Haynie TP, Wong WH, Yang DJ, Tilbury RS, Benjamin R. Evaluation of residual or recurrent musculoskeletal sarcomas using <sup>18</sup>F-FDG PET. J Nucl Med. 1992;33(5): 992.
- 52. Yang DJ, Tansey W, Kuang L-R, Vargas K, Li C, Brown JA, Mallory M, Price J, Liu C-W, Kim EE, Wallace S. Automated synthesis, acute toxicity studies and mapping estrogen receptors with <sup>18</sup>F-tamoxifen. Pharm Res. 1992;9(10): S101.
- 53. Yang DJ, Kuang L-R, Khan S, Vargas K, Tansey W, Li C, Cherif A, Lin W, Liu C-W, Grimmett G, Kim EE, Wallace S. 3'-Deoxy-3'-F-18 fluorouridine: radiosynthesis and biodistribution studies in lung tumor-bearing athymic nude mice. Pharm Res. 1992;9(10): S102.
- 54. Yang DJ, Wallace S, Wright KC, Price J, Kuang L-R, Kim EE. Imaging of estrogen receptors with PET using <sup>18</sup>F-fluoro analog of tamoxifen. 78th Annual Meeting of Radiological Society of North America, Nov. 29-Dec. 4, 1992, Chicago, IL. Radiology 1992:182(P):185-186.
- 55. Kuang L-R, Yang DJ, Li C, Tansey W, Liu C-W, Wallace S. Synthesis and biodistribution studies of particulate ethyldiatrizoate: a hepatolienographic CT contrast agent. 7th Annual Meeting of American Association of Pharmaceutical Scientists, Nov. 15-19, 1992. San Antonio, Texas. Pharm Res. 1992;9(10): S213.
- 56. Li C, Yang DJ, Kuang L-R, Wallace S. Preparation and tissue distribution studies of poly(hydroxypropyl-l-glutamine) microspheres as potential drug carriers. 7th Annual Meeting of American Association of Pharmaceutical Scientists, Nov. 15-19, 1992. San Antonio, Texas. Pharm Res. 1992;9(10): S229.
- 57. Yang DJ, Li C, Kuang L-R, Tansey W, Wallace S. Application of surface-modified microcapsules to target estrogen receptors. 7th Annual Meeting of American Association of Pharmaceutical Scientists, Nov. 15-19, 1992. San Antonio, Texas. Pharm Res. 1992;9(10): S73.

58. Kim EE, Lamki L, Podoloff DA, Yang DJ. Nuclear Medicine RSNA 1991 meeting notes. Radiology 1992;182: 609.

- 59. Kim EE, Lamki L, Podoloff DA, Yang DJ. Nuclear Medicine RSNA 1992 meeting notes. Radiology 1993;186: 12.
- 60. Yang DJ, Cherif A, Kuang L-R, Li C, Tansey W, Kim EE, Wallace S. Development of tamoxifen analogues for breast cancer imaging studies. Eighty-Fourth Annual Meeting of the American Association for Cancer Research, May 19-22, 1993 Orlando, Florida. AACR. Proceedings 1993;34: 235.
- Wong FCL, Ho B, Lu JG, Fan SH, Myen R, Yang DJ, Kim EE. Affinity labeling of neuroreceptors using gamma rays. J Nucl Med. 1993;34(5): 268.
- 62. Kim EE, Korkmaz M, Wong FCL, Haynie TP, Podoloff DA, Wong W-H, Tilbury RS, Yang DJ, Leeds N, Yung A, Benjamin R. Methionine PET in the differentiation of residual or recurrent tumor from posttreatment changes. J Nucl Med. 1993;34(5): 55.
- 63. Yang DJ, Cherif A, Tansey W, Gretzer M, Liu C-W, Kim EE, Wallace S. Rapid synthesis of [18F]fluoromisonidazole for imaging hypoxic tumors. 8th Annual Meeting of AAPS, Nov. 14-18, 1993, Orlando, FL. Pharm Res. 1993;10(10): 118.
- 64. Yang DJ, Cherif A, Kuang L-R, Gretzer M, Liu C-W, Wallace S. Synthesis and evaluation of tamoxifen analogues for diagnostic imaging of breast tumors. Pharm Res. 1993;10(10): 117.
- 65. Kuang L-R, Yang DJ, Li C, Liu C-W, Wallace S. Poly(benzyl-l-glutamate) microcapsules: Their diagnostic and therapeutic potential. Pharm Res. 1993; 10(10): 191.
- 66. Kuang L-R, Yang DJ, Lopez MS, Gretzer M, Li C, Wallace S. Experimental CT enhancement imaging studies using poly(d,l-lactide) microcapsules. Pharm Res. 1993;10(10): 222
- 67. Cherif A, Yang DJ, Tansey W, Kim EE, Wallace S. Synthesis of [18F]fluoromisonidazole ([18F]FMISO) for imaging hypoxic tumors. Proc Amer Assoc Cancer Res. (AACR), 1994;35: 235.
- 68. Li C, Yang DJ, Kuang L-R, Wallace S. Formation and characterization of CDDP loaded poly(benzyl l-glutamate) and poly (dl-lactic acid) microcapsules for chemoembolization. Proc Amer Assoc Cancer Res. (AACR), 1994;35: 336.
- 69. Yang DJ, Cherif A, Price JE, Kuang L-R, Wallace S. Synthesis, imaging and therapy potential of iodo analogue of tamoxifen. Proc Amer Assoc Cancer Res. (AACR), 1994;35: 267.
- 70. Yang DJ, Kim EE, Yu TW, Wallace S, Tansey W, Cherif A, Chang C-W, Yeh SH, Podoloff DA. Rapid synthesis of halomisonidazoles for the evaluation of hypoxic tumors. Annual meeting of A.A.P.S., Nov. 5-10, 1994, San Diego, CA.) Pharm Res. 1994; 11(10): S125.
- 71. Yang DJ, Gretzer MB, Price JE, Kuang L-R, Cromeens DM, Delpassand ES, Wallace S, Kim EE, Podoloff DA. Iodotamoxifen for imaging estrogen-receptor sites and evaluating breast tumor response. Presented at the 41st. Annual Meeting of the Society of Nuclear Medicine, Orlando, FL. J Nucl Med. 1994;35(5): 256.

72. Delpassand ES, Yang DJ, Cromeens DM, Gretzer MB, Podoloff DA. Imaging endometrium using radiolabeled estrogen receptor ligands. J Nucl Med. 1994;35(5): 66.

- 73. Garcia JR, Kim EE, Wong FCL, Hagemeister FB, Haynie TP, Wong WH, Yang DJ, Podoloff DA. Ga-67 citrate scan in the differentiation of bone lymphoma from post-treatment changes: comparison with FDG-PET scan. J Nucl Med. 1994;35(5): 131.
- 74. Kim EE, Garcia JR, Wong FCL, Hagemeister FB, Wong WH, Haynie TP, Yang DJ, Podoloff DA. Differentiation of bone lymphoma from post-treatment changes using PET with F-18 FDG. J Nucl Med. 1994;35(5): 35.
- 75. Kim EE, Garcia JR, Wong FCL, Wong WH, Haynie TP, Yang DJ, Komaki R, Podoloff DA. Differentiation of thoracic tumors from post-treatment changes using PET with F-18 FDG and C-11 methionine. J Nucl Med. 1994;35(5): 76.
- 76. Yeh SH, Wu LC, Liu RS, Yang DJ, Yen SH, Yu TW, Chang CW, Chen KY. Fluorine-18 fluoromisonidazole ([F-18]-FMISO) tumor: muscle retention ratio in detecting hypoxia in nasopharyngeal carcinoma. J Nucl Med. 1994;35(5): 142.
- 77. Li C, Yang DJ, Kuang L-R, Wallace S. Preparation and characterization of cisplatin-loaded PBLG microspheres for chemoembolization. Controlled Release Society, Nice, France, June 27-30, 1994. Proceed Intern Symp Control Rel Bioact Mater. 1994;21: 507-508.
- 78. Yang DJ, Kuang L-R, Li C, Wallace S. Biodistribution and hepatic detection potential-using microencapsulated contrast media. Controlled Release Society, Nice, France, June 27-30, 1994. Proceed Intern Symp Control Rel Bioact Mater. 1994;21:188-189.
- 79. Li C, Kan Z-X, Yang DJ, Kuang L-R, Wallace S. Development of a new particulate contrast media as macrophage imaging agent. Controlled Release Society, Nice, France, June 27-30, 1994. Proceed Intern Symp Control Rel Bioact Mater. 1994;21: 192-193.
- 80. Cherif A, Yang DJ, Kuang L-R, Tansey W, Gretzer MB, Liu CW, Kim EE, Wallace S. Radiosynthesis of [<sup>18</sup>F]erythro-2-nitroimidazole for the noninvasive assessment of tumor hypoxia. Pharm Res. 1994; 11(10): S119.
- 81. Yang DJ, Liu CW, Kuang L-R, Tansey W, Li C, Gretzer MB, Cherif A, Li C, Wallace S. [18F]Fluoroethyluracil:synthesis, cell proliferation assay, biodistribution and PET imaging in tumor-bearing animals. Pharm Res. 1994;11(10): S119.
- 82. Kuang L-R, Cherif A, Li C, Gretzer MB, Liu CW, Yang DJ, Wallace S. Synthesis and in vitro receptor assay of tamoxifen-amino acid conjugates. Pharm Res. 1994;11(10): S121.
- 83. Yang DJ, Cherif A, Kuang L-R, Kim EE, Wallace S, Podoloff DA. Development of [18F]fluoroerythronitromidazole (FETNIM) as a new PET agent for imaging tumor hypoxia. Radiology 1994;193: 300.
- 84. Tewson TJ, Yang DJ, Wong G, Macey D, DeJesus J, Nickles RJ, Perleman SB, Taylor M, Frank P.

  18F-lomefloxacin: Human in vivo pharmacokinetic studies using fluorine-18 labeled drugs. J Labeled Comp Radiopharm. 1994;35: 559-561.

85. Cherif A, Yang DJ, Nornoo A, Inoue T, Wallace S, Podoloff DA. 2-Nitroimidazole analogues: Synthesis and non invasive detection of hypoxic cells. Proceedings of Amer Assoc Cancer Res. (AACR), 1995;36: 210, 1995.

- 86. Delpassand E, Yang DJ, Cherif A, Inoue T, Joubert A, Wallace S, Podoloff DA. Synthesis, biodistribution and estrogen receptor scintigraphy of In-111 tamoxifen analogue. J Nucl Med. 1995;36(5): 161.
- 87. Tansey LW, Yang DJ, Wallace S, Kuang L-R, Inoue T, Kim CG, Li C, Kim EE, Podoloff DA. 5-[I-131]-2'-0-methyluridine: Synthesis and tumor imaging. J Nucl Med. 1995;36 (5): 144.
- 88. Kim CG, Yang DJ, Tansey W, Inoue T, Liu C-W, Kuang L-R, Cherif A, Kim EE, Podoloff DA. Assessment of tumor proliferation rate with F-18 labeled adenosine and uracil. J Nucl Med. 1995;36(5): 148 (Abs. 677).
- 89. Inoue T, Bassa P, Kim EE, Wong FCL, Yang DJ, Podoloff DA. Detection of recurrent or residual lung cancer by PET using <sup>18</sup>FDG. Clin Nucl Med. 1995;20: 91.
- 90. Kim EE, Lamki L, Podoloff DA, **Yang DJ.** RSNA 1995 meeting notes: Nuclear Medicine. Radiology 1995;194: 606-608.
- 91. Joubert A, Lee K-W, Lin J, Cherif A, Li C, Yang DJ. Imaging estrogen receptor sites using hydrophilic and hydrophobic tamoxifen analogues. Tenth Annual Meeting of AAPS, Nov. 5-9, 1995, Miami, FL. Pharm Res. 1995; 12(9): 129.
- 92. Yang DJ, Cherif A, Kuang L-R, Inoue T, Tansey W, Kim EE, Wallace S. <sup>111</sup>In-DTPA-tamoxifen and <sup>111</sup>In-DTPA-retinal: a new cocktail for imaging breast tumors. Tenth Annual Meeting of AAPS, Nov. 5-9, 1995, Miami, FL. Pharm Res. 1995; 129.
- 93. Yang DJ, Delpassand ES, Cherif A, Kuang L-R, Wallace S, Podoloff DA. Development of DTPA-tamoxifen conjugate as a new imaging kit for estrogen receptor tissues. Tenth Annual Meeting of AAPS, Nov. 5-9, 1995, Miami, FL. Pharm Res. 1995;12(9):132.
- 94. Cherif A, Yang DJ, Inoue T, Milas L, Wallace S. Iodoerythronitorimidazole (IETNIM): evaluation as a new hypoxic cell radiosensitizer. Tenth Annual Meeting of AAPS, Nov. 5-9, 1995, Miami, FL. Pharm Res. 1995;12(9): 133.
- 95. Kuang L-R, Wright KC, Yang DJ, Fornage B, Inoue T, Liu WC, Wallace S. Percutaneous intratumoral injection of poly(D,L-lactide) microspheres loaded with cisplatin in tumor-bearing rats. Tenth Annual Meeting of AAPS, Nov. 5-9, 1995, Miami, FL. Pharm Res. 1995; 12(9): 278.
- 96. Cherif A, Yang DJ, Tansey W, Lee K-W, Kim EE, Wallace S. Radiosynthesis and biodistribution studies of [F-18]fluoroadenosine and [I-131]-5-iodo-2'-O-methyl-uridine for the assessment of tumor proliferation rate. Tenth Annual Meeting of A.A.P.S., Nov. 5-9, 1995, Miami, FL. Pharm Res. 1995;12(9): 128.
- 97. Nornoo A, Liu W, Lin J, Lee K-W, Kuang L-R, Cherif A, Yang DJ. Development of new markers of hypoxic cells: [131]iodomisonidazole and [131]iodoerythronitro-imidazole. Tenth Annual Meeting of A.A.P.S., Nov. 5-9, 1995, Miami, FL. Pharm Res. 1995;12(9): 129.

98. Yang DJ, Wallace S, Delpassand E, Cherif A, Kim EE, Podoloff DA. DTPA-tamoxifen and DTPA-retinal: A new combined radiotracer to target breast tumors. 81st Annual Meeting of RSNA. Radiology 1995;197(P): 320.

- 99. Kuang L-R, Yang DJ, Wright KC, Fornage B, Wallace S. Intratumoral injection of microencapsulated cisplatin: a novel approach for cancer therapy. 81st Annual Meeting of RSNA. Radiology 1995;197(P): 136.
- 100. Yang DJ, Wallace S, Li C, Kim EE, Podoloff DA. New radiolabeled ligands for tumor targeting. 81st Annual Meeting of RSNA. Radiology 1995;197(P): 478.
- 101. Cherif A, Wallace S, Yang DJ, Delpassand ES, Kim EE, Podoloff DA. Imaging estrogen receptor sites using tamoxifen ligands. 87th Annual Meeting of Am Assoc for Cancer Research (April 20-24, 1996, Washington DC). Proceedings of Amer Assoc Cancer Res. (AACR), 1996;37:193.
- 102. Li C, Yu D-F, Inoue T, Yang DJ, Milas L, Hunter NR, Wallace S. Synthesis and evaluation of PEG-paclitaxel conjugate as a water soluble paclitaxel prodrug. Proceedings of Amer Assoc Cancer Res. (AACR), 1996;37: 376.
- 103. Li C. Yu D-F, Inoue T, Yang DJ, Milas L, Hunter NR, Wallace S. Cytotoxic and antitumor activity of water soluble paclitaxel prodrug. Proceedings of Amer Assoc Cancer Res. (AACR), 1996;37: 376.
- 104. Yang DJ, Cherif A, Oriuchi N, Tansey W, Kuang L-R, Wallace S, Kim EE, Milas L, Podoloff DA. Development of Acetylacetone-2-nitroimidazole conjugate as a new imaging kit for hypoxic tissues. Presented at the 43rd Society of Nuclear Medicine, June 1-6, 1996, Denver, Colorado. J Nucl Med. 1996;37(5): 72.
- 105. Inoue T, Yang DJ, Oriuchi N, Wallace S, Buzdar A, Tansey W, Kim EE, Cherif A, Kuang L-R, Podoloff DA. Positron emission tomography with F-18 fluorotamoxifen in patients with breast cancer. Presented at the 43rd Society of Nuclear Medicine, Denver, Colorado. J Nucl Med. 1996;37(5): 86.
- 106. Oriuchi N, Yang DJ, Price JE, Kim EE, Wallace S, Kuang L-R, Cherif A, Podoloff DA. Evaluation of estrogen receptor-positive tumor using In-111-DTPA-estradiol. Presented at the 43rd Society of Nuclear Medicine, Denver, Colorado. J Nucl Med. 1996;37(5): 264.
- 107. Inoue T, Kim EE, Wong FCL, Yang DJ, Bassa P, Wong W-H, Podoloff DA. Comparison of fluorine-18-fluorodeoxyglucose (FDG) and carbon-11-methionine (Met) PET in detection of residual or recurrent malignant tumors. Presented at the 43rd Society of Nuclear Medicine, Denver, Colorado. J Nucl Med. 1996;37(5): 261.
- 108. Inoue T, Yang DJ, Wallace S, Cherif A, Tansey W, Kim EE, Milas L, Podoloff DA. Evaluation of [I-131]Iodoerythronitroimidazole as marker for tumor hypoxia and predictor for radiosensitizing effect. Presented at the 43rd Society of Nuclear Medicine, Denver, Colorado. J Nucl Med. 1996;37(5): 253.
- 109. Cherif A, Yang DJ, Kim C-G, Lee B-N, Tansey W, Liu C-W, Kuang L-R, Kim EE, Wallace S, Podoloff DA. I-131 Labeled adenosine: SPECT assessment of tumor proliferation. Eleventh Annual Meeting of A.A.P.S., October 27- November 1, 1996, Seattle, WA. Pharm Res. 1996; 13(9): S145.
- 110. Yang DJ, Wallace S, Cherif A, Tansey W, Kuang L-R, Kim EE, Podoloff DA. Evaluation of intratumoral administration of cisplatin in rats with breast tumors using [I-131]iodomisonidazole.

- Eleventh Annual Meeting of A.A.P.S., October 27-November 1, 1996, Seattle, WA. Pharm Res. 1996; 13(9): S152.
- 111. Yang DJ, Wallace S, Delpassand ES, Cherif A, Kim EE, Podoloff DA. Radiolabeled tumor markers for PET/SPECT. The 36th Annual Meeting of the Japanese Society of Nuclear Medicine, Kyoto, Japan, September 30-October 4, 1996. Annals of Nucl Med. 1996; 10 S168.
- 112. Yang DJ, Tansey W, Wallace S, Inoue T, Dobbs FR, Bolomey LA, Kim EE, Podoloff DA. New autosynthetic device for production of radiopharmaceuticals. Presented at the 44th Society of Nuclear Medicine, San Antonio, TX, June1-June 5, 1997. J Nucl Med. 1997;38(5): S307P.
- 113. Jeong JM, Yang DJ, Chang YS, Lee YJ, Kim C, Kim YJ, Lee DS, Chung J-K, Lee MC, Koh C-S. Efficient radiosynthesis and biodistribution of 2'-deoxyarabino-2'F-18-fluoro-3',5',6-triacetyladenine in tumor-bearing rodents: a prodrug of fluoroadenosine for PET assessment of proliferation. Presented at the 44th Society of Nuclear Medicine, San Antonio, TX, June 1-June 5, 1997. J Nucl Med. 1997;38(5): S177P.
- 114. Jeong JM, Lee YJ, Kim C, Chang YS, Kim YJ, Lee DS, Chung J-K, Lee MC, Koh C-S, Cho J-H, Yang DJ. Simple synthesis of [F-18]2-'fluoro-3',5'-di-O-acetyl-2'-deoxyarabino-6-N-acetyladenine for detecting tumors: a prodrug of fluoroadenosine. XIIth International Symposium on Radopharmaceutical Chemistry, Uppsala, Sweden, June 15-19, 1997. Radiopharm Chem. Abstracts & Programme, pp23-24, 1997.
- 115. Yang DJ, Tansey W, Wallace S, Inoue T, Dobbs FR, Cherif A, Kim EE, Podoloff DA. New Multi-purpose autosynthesis apparatus for production of radiopharmaceuticals. XIIth International Symposium on Radopharmaceutical Chemistry, Uppsala, Sweden, June 15-19, 1997. Radiopharm Chem. Abstracts & Programme, pp240-242, 1997.
- 116. Cherif A, Delpassand ES, Wallace S, Cromeens D, Zareneyrizi F, Podoloff DA, Yang DJ.
  Radiosynthesis of tamoxifen analogues for imaging endometrial disease. XIIth International Symposium on Radopharmaceutical Chemistry, Uppsala, Sweden, June 15-19, 1997. Radiopharm Chem. Abstracts & Programme, pp338-339, 1997.
- 117. Jeong JM, Lee YJ, Kim C, Chang YS, Kim YJ, Lee DS, Chung J-K, Lee MC, Koh C-S, Cho J-H, Yang **DJ.** PET imaging agents for hypoxic tumor: F-18 labeled nitroimidazole analogues. XIIth International Symposium on Radopharmaceutical Chemistry, Uppsala, Sweden, June 15-19, 1997. Radiopharm Chem. Abstracts & Programme, pp349-350, 1997.
- 118. Yang DJ, Wong FCL, Kim C-G, Liu C-W, Tansey LW, Oriuchi N, Lee B-N, Kim EE, Podoloff DA. Synthesis and evaluation of uracil analogues in tumor-bearing rodents for PET and SPECT assessment of tumor cell proliferation. Twelveth Annual Meeting of AAPS., November 3-7, 1997, Boston, MA. Pharm Res. 1997; 14(11): 397.
- 119. Yang DJ, Cherif A, Wong FCL, Zareneyrizi F, Choe J-G, Liu C-W, Kim EE, Podoloff DA. In vivo tissue distribution of radioiodinated emodin and rutin: tyrosine kinase inhibitors. Twelveth Annual Meeting of AAPS, November 3-7, 1997, Boston, MA. Pharm Res. 1997;14(11): 397.
- 120. Koomen JM, Liu C-W, Kuang L-R, Zareneyrizi F, Yang DJ. Intratumoral injection of cisplatin particulates or microcapsules decreases nephrotoxicity over cisplatin solution while retaining anti-cancer activity. Twelveth Annual Meeting of AAPS, November 3-7, 1997, Boston, MA. Pharm Res. 1997; 14(11): 525.

121. Yang DJ, Delpassand ES, Cromeens D, Cherif A, Wallace S, Zareneyrizi F, Kim EE, Podoloff DA. Diagnosis of endometriosis in monkeys using radiolabeled tamoxifen analogues. Twelveth Annual Meeting of AAPS, November 3-7, 1997, Boston, MA. Pharm Res. 1997;14(11): 398.

- 122. Li C, Inoue T, Yu D, Yang DJ, Tansey W, Oriuchi N. Tumor uptake and antitumor activity of In-111 labeled DTPA-paclitaxel in murine tumors. Radiological Society of North America (RSNA) 83rd Scientific Assemby & Annual Meeting, November 30-December 5, 1997, Chicago, Illinois. Radiology 1997;205: 479.
- 123. Higuchi T, Yang DJ, Ilgan S, Wallace S, Tansey LW, Zare F, Mathai M, Inoue T, Endo K, Kim EE, Podoloff DA. In Vitro and In Vivo Evaluation of In-111 DTPA-Adriamycin. Presented at the 45th Society of Nuclear Medicine, Toronto, Canada, June7-11, 1998. J Nucl Med. 1998;39(5): 234P.
- 124. Nichol CA, Yang DJ, Higuchi T, Tansey W, Humphrey W, Ilgan S, Zare F, Wallace S, Podoloff DA. Imaging and biodistribution of polyethylene imine, A nonviral gene transfection agent. J Nucl Med. 1998;39(5): 233P.
- 125. Zakko S, Ilgan S, Boulfelfel J, Shamsi HA, Higuchi T, Zare F, Yang DJ, Kim EE. Imaging tumor folate receptors using In-111 DTPA-methotrexate. J Nucl Med. 1998;39(5): 234P.
- 126. Liu C-W, Koomen JM, Yu D-F, Kuang L-R, Yang DJ. Cisplatin microspheres for breast cancer therapy. The 25th International Symposium on Controlled Release of Bioactive Materials, June 21-24, 1998, Las Vegas, NV. Proceeding Int'l. Symp Control Rel Bioact Mater. 1998;25: 709-710.
- 127. Kan Z, Nichol CA, Li C, Yang DJ, Thomas JW, Charnsangavej C. Non-viral vectors in targeted biologic imaging and gene therapy in cancer: Experimental studies and development. 84th Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, IL. Nov. 29- Dec. 4, 1998. Radiology 1998;209: 530.
- 128. Nichol CA, Yang DJ, Li C, Charnsangavej C. Novel polymers for gene therapy. 84th Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, IL. Nov. 29- Dec. 4, 1998. Radiology 1998;209: 443.
- 129. Yang DJ, Tansey LW, Kim EE, Podoloff D. A. Development of a multi-purpose autosynthesis apparatus for production of radiopharmaceuticals. Presented at the 46<sup>th</sup> Annual Meeting of the Society of Nuclear Medicine, Los Angeles, CA, June 6-11, 1999. J Nucl Med. 1999;40(5):1467p.
- 129. Zare F, Yang DJ, Higuchi T, Ilgan S, Yu D-F, Mathai M, Kim EE, Podoloff DA. Synthesis of <sup>99m</sup>Tc-ethylenedicysteine-colchicine for evaluation of antiangiogenic effect. Presented at the 46<sup>th</sup> Annual Meeting of the Society of Nuclear Medicine, Los Angeles, CA, June 6-11, 1999. J Nucl Med. 1999;40(5):1367p.
- Ilgan S., Yang DJ, Higuchi T, Zare F, Yu D-F, Bayhan H, Inoue T, Nair N, Kim EE, Podoloff DA.
  99m Tc-Ethylenedicysteine-folate as a new tumor imaging agent: synthesis, labeling and evaluation in animals. Presented at the 46<sup>th</sup> Annual Meeting of the Society of Nuclear Medicine, Los Angeles, CA, June 6-11, 1999. J Nucl Med. 1999;40(5):404p.
- 131. Yang DJ, Ilgan S, Higuchi T, Zare F, Tansey LW, Nair N, Oh C-S, Liu C-W, Kim EE, Podoloff DA.

  Noninvasive assessment of tumor hypoxia with <sup>99m</sup>Tc-labeled metronidazole. Presented at the 46<sup>th</sup> Annual

- Meeting of the Society of Nuclear Medicine, Los Angeles, CA, June 6-11, 1999. J Nucl Med. 1999;40(5):1366p.
- 132. Yang DJ, Kim EE, Ilgan S, Zareneyrizi, Yu D-F, Liu C-W, Podoloff DA. Imaging tumor folate receptors using <sup>99m</sup>Tc-ethylenedicysteine-folate. Presented at the 90<sup>th</sup> Annual Meeting of the American Association for Cancer Research, April 10-14, 1999, Philadelphia, PA. Proceedings of the AACR 1999;40: 259. (abstract #1720).
- 133. Yang DJ, Zakko S, Boulfelfel J, Shamsi H, Ilgan S, Yu D-F, Tansey L, Liu C, Zare F, Kim E, Podoloff DA. Imaging tumor folate receptors using radiolabeled folate and methotrexate. Presented at 13<sup>th</sup> International Symposium on Radiopharmaceutical Chemistry, June 27-July 1, 1999, St. Louis, MO. J Labelled Cpd Radiopharm. 1999;42(1):S696.
- 134. Yang DJ, Liu C-W, Yu D-F, Oh C-S, Kim EE. Assessment of therapeutic efficiency using <sup>99m</sup>Tc-EC-nitroimidazole by planar scintigraphy. Presented at Fourteenth Annual Meeting of AAPS., November 15-18, 1999, New Orleans, LA. Pharm Res. 1999; 1(4): S396. (Abs#3110)
- 135. Yang DJ, Kim EE, Liu C-W, Yu D-F, Podoloff DA. Assessment of ovarian cancer treatment response using a hypoxic marker: <sup>99m</sup>Tc-EC-NIM. Presented at International Conference on "Molecular Targets and Cancer Therapeutics", American Association for Cancer Research, November 16-19,1999, Washington, DC.
- 136. Yang DJ, Yu D-F, Azhdarinia A, Zareneyrizi F, Herbst R, Kim EE. Assessment of apoptosis using <sup>99m</sup>Tc-EC-nitroimidazole, <sup>99m</sup>Tc-annexin V and <sup>99m</sup>Tc-endostatin in tumor-bearing rodents by planar scintigraphy. Presented at 42<sup>nd</sup> Annual Clinical Conference and 52<sup>nd</sup> Annual Symposium on Fundmental Cancer Research, Jan . 9-12, 2000, Houston, TX. Cancer Research Millennium 2000;52;147 (Abstract IV 47).
- 137. **Yang DJ**, Yu D-F, Azhdarinia A, Zareneyrizi F, Tansey W, Kim EE. Molecular imaging using <sup>99m</sup>Tc-EC-nitroimidazole and <sup>99m</sup>Tc-EC-annexin V in tumor-bearing rodents. Proceedings of the AACR 2000;41,766. (Abstract 4865).
- 138. Kim EE, Yang DJ, Kim C-G, Azhdarinia A, Zare F, Nair N, Podoloff DA. Imaging hypoxic tissue with <sup>99m</sup>Tc-labeled metronidazole. J Nucl Med. 2000;41 (5):285p.
- 139. Kim EE, Yang DJ, Choe J-G, Azhdarinia A, Yu D-F, Zare F, Nair N, Podoloff DA. Synthesis, biodistribution and imaging of mammary tumors using <sup>99m</sup>Tc-EC-polyglutamate: a glutamate receptor peptide. J Nucl Med 2000;41 (5):231p.
- 140. Yang DJ, Herbst R, Azhdarinia A, Kim EE, Podoloff DA. <sup>131</sup>I- and <sup>99m</sup>Tc-endostatin: biodistribution and imaging in mammary tumor-bearing rats. J Nucl Med 2000;41 (5):33p.
- 141. Azhdarinia A, Yang DJ, Wong FC, Tansey LW, Inoue T, Kim EE, Podoloff DA. Rapid synthesis of <sup>18</sup>F-fluoropropyl-α-methyltyrosine. J Nucl Med 2000;41 (5):243p.
- 142. Yang DJ, Ilgan S, Yu D-F, Azhdarinia A, Kim EE, Podoloff DA. Assessment of apoptosis using Tc99mEC-nitroimidazole and Tc-99mEC-annexin V. Presented at the 7th Asia and Oceania Congress of
  Nuclear Medicine and Biology and The 4th International Congress of Nuclear Oncology, Istanbul,
  Turkey, October 1-5, 2000.
- 143. Yang DJ, Kim EE, Kim C-G, Azhdarinia A, Podoloff DA. Targeted imaging of hypoxic tissue using Tc-

<sup>99m</sup>EC-metronidazole. Presented at the 7<sup>th</sup> Asia and Oceania Congress of Nuclear Medicine and Biology and The 4<sup>th</sup> International Congress of Nuclear Oncology, Istanbul, Turkey, October 1-5, 2000. Turk J Nucl Med. 2000;9(3):67.

- 144. Yang DJ, Tansey W, Azhdarinia A, Zakko S, Boulfelfel J, Kim EE, Herbst RS, Podoloff DA. Tumor vascular targeted imaging using radiolabeled endostatin and VEGF in tumor-bearing rodents. Presented at the 7<sup>th</sup> Asia and Oceania Congress of Nuclear Medicine and Biology and The 4<sup>th</sup> International Congress of Nuclear Oncology, Istanbul, Turkey, October 1-5, 2000. Turk J Nucl Med. 2000;9(3): 68.
- 145. Tansey LW, Yang DJ, Azhdarinia A, Inoue T, Kim EE, Podoloff DA. Automated synthesis of F-18-fluoropropyl-α-methyltyrosine. Presented at the 7<sup>th</sup> Asia and Oceania Congress of Nuclear Medicine and Biology and The 4<sup>th</sup> International Congress of Nuclear Oncology, Istanbul, Turkey, October 1-5, 2000. Turk J Nucl Med. 2000;9(3): 91.
- 146. Yang DJ, Lee JCJ, Lee K, Yu C. Effect of Leuca-F-1 herbal concentrated granules on the white blood cells and platelets during chemotherapy. Presented at the 2000 American Association of Pharmaceutical Scientists, Indianapolis, Indiana, October 29-November 2, 2000. AAPS PharmSci Supplemet Vol. 2, No. 4, 2000 (electronic journal, www.pharmsci.org/journal)
- 147. Yang DJ, Zakko S, Azhdarinia A, Yu D-F, Tansey W, Kim EE, Podoloff DA. <sup>99m</sup>Tc-EC-nitroimidazole: Changes in biodistribution and imaging findings following chemotherapy. Presented at the 2000 American Association of Pharmaceutical Scientists, Indianapolis, Indiana, October 29-November 2, 2000. AAPS PharmSci Supplemet Vol. 2, No. 4, 2001 (electronic journal, <a href="www.pharmsci.org/journal">www.pharmsci.org/journal</a>).
- 148. Azhdarinia A, Sharma C, Yang DJ, Vaporciyan AA, Mohiuddin IT, Yu D-F, Kim EE, Podoloff DA. Assessment of Apoptosis With <sup>99m</sup>Tc-EC-Annexin V. Presented at the 2000 American Association of Pharmaceutical Scientists, Indianapolis, Indiana, October 29-November 2, 2000. AAPS PharmSci Supplemet Vol. 2, No. 4, 2000 (electronic journal, www.pharmsci.org/journal)
- 149. Yang DJ, Kim DS, Azhdarinia A, Yu D-F, Kim EE, Podoloff DA. Tumor Vascular Targeted Imaging with Radiolabeled VEGF. Proceedings of the AACR 2001;42:206 (Abstract 1103).
- 150. Azhdarinia A, Yang DJ, Sharma C, Vaporciyan A, Yu D-F, Kim EE, Podoloff DA. Human lung tumor cells detection of apoptosis using radiolabeled annexin V. J Nucl Med. 2001;42(5): 261.
- 151. Yang DJ, Zakko S, Azhdarinia A, Yu D-F, Kalimi SK, Kim EE, Podoloff DA. In vivo and in vitro measurement of apoptosis in breast cancer cells using <sup>99m</sup>Tc-EC-annexin V. J Nucl Med. 2001;42 (5): 83.
- 152. Yang DJ, Herbst R, Fogler WE, Abbruzzes J, Azhdarinia A, Mullani NA, Kalimi SK, Kim EE, Podoloff DA. Targeted angiogenesis tumor vascular imaging with radiolabeled endostatin. J Nucl Med. 2001;42(5): 70.
- 153. Azhdarinia A, Yang DJ, Zakko S, Yu D-F, Kim EE, Podoloff DA. Comparison of <sup>99m</sup>Tc-EC-deoxyglucose and <sup>18</sup>F-FDG. J Nucl Med. 2001;42(5): 257.
- 154. Yang DJ, Kim C-G, Kim EE, Yu D-F, Azhdarinia A, Podoloff DA. Biodistribution and imaging with <sup>99m</sup>Tc-EC-deoxyglucose. J Nucl.Med. 2001;42(5): 27.
- 155. Kim EE, Kim C-G, Yang DJ, Podoloff DA. Preliminary tumor metabolic imaging with <sup>99m</sup>Tc-EC-deoxyglucose. J Nucl Med. 2001;42(5): 308.

156. Bom HS, Song HC, Cho KH, Kim BC, Kim SM, Kim CK, Kim JY, Yang DJ, Kim EE. Prognostification of patients with acute cerebral infarction using <sup>99m</sup>Tc metronidazole brain SPECT. J Nucl Med. 2001;42(5): 109.

- 157. Yang DJ, Azhdarinia A, Yu D-F, Kalimi SK, Kim EE, Podoloff, D.A. Measurement of apoptosis in cancer cells using <sup>99m</sup>Tc-EC-annexin V. 19<sup>th</sup> Annual Conference on Houston Conference on Biomedical Engineering Research, University of Houston Hilton Hotel, Houston, Texas February 8-9, 2001, (Abstract: Small animal imaging, sec. 9.1, p.53)
- 158. Vaporciyan AA, Mohiuddin I, Sharma C, Azhdarinia A, Yang D, Putnam JB. Neutrophil Depletion Reduces Lung Injury After Lung Perfusion for Pulmonary Metastasis. 87th Annual Congress of the American College of Surgeons, New Orleans, LA, Surgical Forum Volume, 2001.
- 159. Yang DJ, Azhdarinia A, Yu D-F, Kim EE, Podoloff DA. <sup>99m</sup>Tc-EC-deoxyglucose: Synthesis, cellular uptake, biodistribution and scintigraphic imaging. Presented at the 14<sup>th</sup> International Symposium on Radiopharmaceutical Chemistry, Interlaken, Switzerland, June 10-15, 2001. J Labelled Cpd Radiopharm 2001;44 (1): 513-514.
- 160. Kohanim SK, Yang DJ, Yu D-F, Azhdarinia A, Kim EE. Assessment of endostatin therapy using <sup>99m</sup>Tc-EC-Endostatin. Presented at the 2001 American Association of Pharmaceutical Scientists, Denver, CO, October 20-October 25, 2001. AAPS PharmSci Supplemet Vol. 3, No. 3, 2001 (electronic journal, www.pharmsci.org/journal).
- 161. Kim EE, **Yang DJ**, Herbst R, Azhdarinia A, Yu D-F, Podoloff DA. Assessment of antiangiogenic effect with Tc-99m labeled endostatin. Radiology 2001;221:291.
- 162. Kim EE, **Yang DJ**, Kim C-G, Azhdarinia A, Podoloff DA. In vitro and in vivo comparison of <sup>99m</sup>Tc-EC-deoxyglucose and <sup>18</sup>F-FDG. Radiology 2001;221:290.
- 163. Yukihiro M, Yang DJ, Yu D-F, Azhdarinia A, Kohanim S, Oh C-S, Ozaki K, Kim EE, Podoloff DA. Assessment of angiogenesis using <sup>99m</sup>Tc-labeled endostatin and angiostatin. Proceedings of the AACR 2002;43:898 (Abstract 4456).
- 164. Yukihiro M, Yang DJ, Inoue T, Yu D-F, Kohanim S, Azhdarinia A, Bryant JL, Kim EE, Podoloff DA. In vitro cellular uptake and in vivo biodistribution of <sup>99m</sup>Tc-EC-angiostatin. J Nucl Med. 2002;43 (5):366 (Abstract 1471).
- 165. Schechter NR, Yang DJ, Ang K, Yu D-F, Tansey LW, Bryant JL, Kim EE, Podoloff DA. Preliminary tumor egf receptor imaging with <sup>99m</sup>Tc-EC-C225. J. Nucl. Med. 2002;43 (5): 269 (Abstract 1088).
- 166. Azhdarinia A, Yang DJ, Zakko S, Yukihiro M, Yu D-F, Bryant JL, Kohanim S, Kim EE, Podoloff DA. Targeted tumor imaging using <sup>99m</sup>Tc-EC-deoxyglucose in comparison with <sup>18</sup>F-FDG. J Nucl Med 2002;43 (5): 273 (Abstract 1102).
- Azhdarinia A, Yukihiro M, Yang DJ, Bryant JL, Kim C-G, Yu D-F, Kohanim S, Kim EE, Podoloff DA. Imaging angiogenesis using <sup>99m</sup>Tc-EC-endostatin. J Nucl Med 2002;43 (5): 121 (Abstract 435).
- 168. Yang DJ, Macapinlac HA, Yu D-F, Azhdarinia A, Kohanim S, Bryant JL, Kim EE, Podoloff DA. Glucosamine pathway imaging using <sup>99m</sup>Tc-EC-deoxyglucose in comparison with <sup>18</sup>F-FDG. J Nucl Med 2002;43 (5):368 (Abstract 1478).

169. Oh C-S, Yang DJ, Kim C-G, Yu D-F, Yukihiro M, Kohanim S, Azhdarinia A, Bryant JL, Kim EE, Podoloff DA. 99mTc-Labeled nitroimidazole analogues for assessment of tumor hypoxia. J Nucl Med 2002;43 (5): 367 (Abstract 1475).

- 170. Ozaki K, Yang DJ, Macapinlac HA, Yu D-F, Kohanim S, Kim EE, Podoloff DA. <sup>18</sup>F-Fluoropenciclovir for PET assessment of hsv-tk reporter gene expression and localization. J Nucl Med 2002;43 (5): 274 (Abstract 1109).
- 171. Wong FC, Sparks RB, Kim EE, Yang DJ, Podoloff DA. Simulation of radiation dosimetry in intracavitary injection of 8 radionuclides in 5 shell models. J Nucl Med 2002;43 (5): 90 (Abstract 324).
- 172. Azhdarinia A, Yang DJ, Schechter NR, Yu D-F, Bryant J, Kohanim S, Kim EE, Podoloff DA. <sup>99m</sup>Tc-EC-C225: An EGFR Targeting Tracer To Assess Angiogenesis. Presented at the 6th International Symposium on Technetium, Rhenium and other Metals in Chemistry and Nuclear Medicine, Bressanone, Italy, September 4-7, 2002 (Abstract # CP5).
- 173. Azhdarinia A, Yang DJ, Yukihiro M, Yu D-F, Bryant J, Kim EE, Podoloff DA. <sup>99m</sup>Tc- Labeled Endostatin and Angiostatin for Angiogenesis Imaging. Presented at the 6th International Symposium on Technetium, Rhenium and other Metals in Chemistry and Nuclear Medicine, Bressanone, Italy, September 4-7, 2002 (Abstract # BP1).
- 174. Azhdarinia A, Yang DJ, Bryant J, Yukihiro M, Yu D-F, Oh C-S, Kohanim S, Kim EE, Podoloff DA. Radiosynthesis, biodistribution and planar scintigraphy of <sup>99m</sup>Tc-EC-COXi in tumor bearing animal models. J Nucl Med 2003;44 (5): 98 (Abstract 319).
- 175. Yang DJ, Azhdarinia A, Oh C-S, Mendez R, Yukihiro M, Yu D-F, Kim EE, Podoloff DA. Noninvasive assessment of tumor hypoxia with <sup>99m</sup>Tc- and <sup>188</sup>Re-EC-metronidazole. J Nucl Med 2003;44 (5): 99 (Abstract 322).
- 176. Bom HS, Song HC, Heo YJ, Kim SM, Jeong MH, Kim W, Kim CK, Yang DJ, Kim EE. Detection of hypoxic myocardium by intracoronary infusion of <sup>99m</sup>Tc-EC-metronidazole in patients with chronic coronary artery disease. J Nucl Med 2003;44 (5): 98 (Abstract 508).
- 177. Ozaki K, Yang DJ, Hamidzadeh A, Hu C-T, Saso H, Yu D-F, Kohanim S, Kim EE, Podoloff DA. Assessment of tumor imaging using <sup>99m</sup>Tc-labeled guanine analogue. J Nucl Med 2003;44 (5): 298 (Abstract 1067).
- 178. Yukihiro M, Yang DJ, Azhdarinia A, Yu D-F, Kim C-G, Kohanim S, Bryant JL, Kim EE, Podoloff DA. Assessment of tumor growth with <sup>99m</sup>Tc-EC-glucosamine. J Nucl Med 2003;44 (5):299 (Abstract 1071).
- 179. Azhdarinia A, Yang DJ, Yukihiro M, Chao CKS, Yu D-F, Bryant JL, Kim EE, Podoloff DA. <sup>99m</sup>Tc-labled endostatin and angiostatin for angiogenesis imaging. J Nucl Med 2003;44 (5): 302 (Abstract 1082).
- Wendt RE, Schechter NR, Erwin WD, Stachowiak AM, Ang KK, Kim EE, Yang DJ. Dosimetry of <sup>99m</sup>Tc-EC-Erbitux in six patients with squamous cell carcinoma of the head and neck. J Nucl Med 2003;44 (5):323 (Abstract 1157).
- Azhdarinia A, Yang DJ, Yukihiro M, Bryant JL, Yu D-F, Kohanim S, Kim EE, Podoloff DA. Imaging, dosimetry and acute toxicity with <sup>99m</sup>Tc-EC-deoxyglucose in tumor-bearing animals. J Nucl Med

- 2003;44 (5):323 (Abstract 1158).
- 182. Kohanim S, Sharma C, Yukihiro M, Yang DJ, Azhdarinia A, Yu D-F, Bryant JL, Kim EE, Podoloff DA. Targeting lipid metabolism with <sup>99m</sup>Tc-EC-TML: a carnitine analogue. J Nucl Med 2003;44 (5):301 (Abstract 1077).
- 183. Oh C-S, Yang DJ, Yukihiro M, Azhdarinia A, Yu D-F, Kim C-G, Kohanim S, Bryant JL, Kim EE, Podoloff DA. Synthesis and evaluation of adenosine analogue in tumor-bearing rodents for assessment of tumor cell proliferation. J Nucl Med 2003;44 (5):301 (Abstract 1078).
- Mendez R, Oh C-S, Azhdarinia A, Yang DJ, Yu D-F, Yukihiro M, Bryant JL, Kim EE, Podoloff DA. *In vitro* and *in vivo* evaluation of <sup>99m</sup>Tc-EC-doxorubicin as a marker of MDR to doxorubicin. J Nucl Med 2003;44 (5): 303 (Abstract 1084).
- 185. Ito M, Yang DJ, Azhdarinia A, Mendez R, Kohanim S, Oh C-S, Yu D-F, Bryant JL, Chao CKS, Kim EE. PET and planar imaging of tumor hypoxia with radiolabeled metronidazole. Proceedings of the AACR 2004;45:104 (Abstract 946).
- Mendez R, Bryant J, Yang DJ, Lin E, Chang JY, Ito M, Azhdarinia A, Kim EE, Podoloff DA. Imaging COX-2 expression with <sup>99m</sup>Tc-labeled celebrex. Proceedings of the AACR 2004;45:104 (Abstract 948).
- 187. Chao KC, Yang DJ, Yang T, Azhdarinia A. Assessment of DNA/RNA proliferation using radiolabeled guanine analogues by PET and SPECT. Molecular Imaging and Biology 2004;6(2):107 (abstract 145).
- 188. **Yang DJ**, Chao KC, Yang T. Non-invasive assessment of tumor hypoxia with <sup>99m</sup>Tc-, <sup>188</sup>Re- and <sup>68</sup>Ga-EC-metronidazole. Molecular Imaging and Biology 2004;6(2):110 (abstract 156).
- 189. Rollo FD, Bryant J, Yang DJ, Bai C, Kim EE, Yu D-F, Ye J, Durbin MK, Garrard J, Shao L. The complementary role of FDG and Tc-99m ECDG for image guided therapy. J Nucl Med 2004;45 (5): 337 (Abstract 1062).
- 190. Azhdarinia A, Yang DJ, Yu D-F, Oh C-S, Kohanim S, Mendez R, Ito M, Bryant JL, Kim EE, Podoloff DA. Local Regional Chemotherapy and Radiotherapy Using an In Situ Hydro-Gel and Planar Imaging for Assessment of Tumor Growth. J Nucl Med 2004;45 (5): 389 (Abstract 1222).
- 191. Chao CKS, Yang DJ, Mawlawi O, Ito M, Azhdarinia A, Kohanim S, Yu D-F, Kim EE, Podoloff DA.

  Cu- and Ga- labeled Guanine Analogue: A Cell Cycle-Specific Tracer for Assessment of Cellular Proliferation by PET. J Nucl Med 2004;45 (5): 448 (Abstract 1396).
- 192. Yang DJ, Chang JY, Mendez R, Bryant J, Azhdarinia A, Oh C-S, Kohanim S, Ito M, Kim EE, Lin E, Podoloff DA. 99m Tc-labeled celebrex: synthesis, in vitro and in vivo assessment of cox-2 expression. J Nucl Med 2004;45 (5): 451 (Abstract 1406).
- 193. Oh C-S, Ozaki K, Yang DJ, Zakko S, Inoue T, Azhdarinia A, Bryant J, Kim C-G, Kohanim S, Kim EE, Podoloff DA. Assessment of tumor cell proliferation with <sup>99m</sup>Tc-labeled adenosine and guanine analogues. J Nucl Med 2004;45 (5): 452 (Abstract 1407).
- 194. Yang DJ, Oh C-S, Yu D-F, Kohanim S, Azhdarinia A, Ito M, Mendez R, Chanda M, Bryant J, Kim EE, Podoloff DA.Imaging sulfonylurea receptors on the pancreas beta-cell using Tc-99m labeled sulfonylurea agents. J Nucl Med 2004;45 (5): 462 (Abstract 1435).

195. Kohanim S, Yang DJ, Mohan R, Komaki R, Ito M, Azhdarinia A, Yu D-F, Kim EE, Podoloff DA.

99m Tc-labeled amifostine: synthesis, biodistribution and scintigraphic imaging in rodents. J Nucl Med
2004;45 (5): 463 (Abstract 1437).

- 196. Yang DJ, Schechter N, Kohanim S, Azhdarinia A, Yu D-F, Mendez R, Oh C-S, Kim EE. In vitro and in vivo assessment of tumor growth with <sup>99m</sup>Tc-EC-DG presented at the 50<sup>th</sup> annual meeting of the Southwestern Chapter Society of Nuclear Medicine, San Antonio TX, April 15-17, 2005.
- 197. Azhdarinia A, Kohanim S, Yang DJ, Yu D-F, Mendez R, Oh C-S, Chanda M, Kim EE. Imaging estrogen receptors with <sup>99m</sup>Tc-labeled estradiol. presented at the 50<sup>th</sup> annual meeting of the Southwestern Chapter Society of Nuclear Medicine, San Antonio TX, April 15-17, 2005.
- 198. Yang DJ, Bryant J, Schechter N, Kohanim S, Azhdarinia A, Yu D-F, Mendez R, Oh C-S, Kim EE. Biodistribution and imaging tumors with <sup>99m</sup>Tc-EC-DG in animals and humans. 2005 AACR Annual Meeting in Anaheim, California (April 16-19). Proceedings of the AACR 46: 2005 (Abstract 3821).
- 199. Mendez R, Yang DJ, Chao CKS, Azhdarinia A, Oh C-S, Chanda M, Yu D-F, Kim EE. Assessment of tumor hypoxia with radiolabeled metronidazole. 2005 AACR Annual Meeting in Anaheim, California (April 16-19). Proceedings of the AACR 46: 2005 (Abstract 3823).
- 200. Azhdarinia A, Yang DJ, Oh C-S, Chanda M, Kohanim S, Bryant J, Bryant J, Mendez R, Kim EE, Podoloff DA. <sup>99m</sup>Tc- and <sup>68</sup>Ga-EC-Guan for the assessment of Tumor Growth. 2005 AACR Annual Meeting in Anaheim, California (April 16-19). Proceedings of the AACR 46: 2005 (Abstract 3822).
- 201. Bryant J, Yang DJ, Schechter N, Kohanim S, Azhdarinia A, Yu D-F, Mendez R, Oh C-S, Kim EE. 99mTc-EC-DG: A novel tracer for tumor imaging. 2005 Annual Meeting of the American Society of Clinical Oncology in Orlando, FL (May 13-17). Proceedings of the ASCO (Abstract).
- 202. Yang DJ, Schechter N, Kohanim S, Bryant J, Chiu N-T, Azhdarinia A, Yu D-F, Stachowiak A, Oh C-S, Kim EE. Assessment of tumor growth and radiation dosimetry estimation with <sup>99m</sup>Tc-EC-DG. 52<sup>nd</sup> Annual Meeting of the Society of Nuclear Medicine. J Nucl Med 2005; 46(5):387 (abstract 1259).
- 203. Kim EE, Azhdarinia A, Kohanim S, Inoue T, Yu D-F, Oh C-S, Chanda M, Karacalioglu A, Yang DJ. Biodistribution and imaging of functional estrogen receptors with Tc-labeled estradiol. J Nucl Med 2005; 46(5):358 (abstract 1169).
- 204. Azhdarinia A, Oh C-S, Kohanim S, Ito M, Inoue T, Yang DJ, Bryant J, Yu D-F, Mendez R, Karacalioglu A, Chanda M, Kim EE. Tc-EC-Guanine: synthesis, cellular uptake, biodistribution and planar imaging. J Nucl Med 2005; 46(5):360 (abstract 1175).
- 205. Mendez R, Oh C-S, Yang DJ, Azhdarinia A, Kim C-G, Kohanim S, Yu D-F, Bryant J, Chanda M, Kim EE. Imaging tumor hyopxia with EC-MN by PET, SPECT AND MRI. J Nucl Med 2005; 46(5):191 (abstract 550).
- 206. Yang DJ, Oh C-S, Azhdarinia A, Yu D-F, Chanda M, Bryant J, Kim EE. Radiolabeled alphamethyltyrosine: synthesis, cellular uptake, biodistribution and imaging of mammary tumors. J Nucl Med 2005; 46(5):389 (abstract 1263).
- 207. Karacalioglu A, Chanda M, Oh C-S, Yang DJ, Azhdarinia A, Kohanim S, Yu D-F, Bryant J, Kim EE. Epigenetic imaging: assessment of histone synthesis in human prostate cancer with <sup>99m</sup>Tc-DMSA-

- LYSINE-N( $\alpha$ )-BOC. J Nucl Med 2005; 46(5):368 (abstract 1200).
- 208. Oh C-S, Chanda M, Yang DJ, Azhdarinia A, Ito M, Chao CKS, Kohanim S, Yu D-F, Bryant J, Kim EE. Assessment of tumor growth with radiolabeled guanine. J Nucl Med 2005; 46(5):389 (abstract 1264).
- 209. Kohanim S, Yang DJ, Bryant J, Azhdarinia A, Yu D-F, Mendez R, Oh C-S, Kim EE. Quantification of tumor apoptosis with <sup>99m</sup>Tc-annexin-V. J Nucl Med 2005; 46(5):391 (abstract 1270).
- 210. Chang CW, Tsai CH, Liu RS, Yang DJ, Wang SJ, Yeh SH. The automatic robotic synthesis of N.C.A. <sup>18</sup>F-tamoxifen. J Nucl Med 2005; 46(5):369 (abstract 1203).
- 211. Kim EE, Yang DJ, Kohanim S, Azhdarinia A, Yu D-F, Mendez R, Bryant JL, Oh C-S. Targeted Imaging of Tumor Apoptosis with <sup>99m</sup>Tc-EC-Annexin-V. Presented at the Annual Congress of the European Assocation of Nuclear Medicine in Istanbul/Turkey, October 15 19, 2005, Eur J Nucl Med Mol Imaging 2005; 32 (Supp 1): S98 (abstract 367).
- 212. Azhdarinia A, Yang DJ, Yu D-F, Mendez R, Karacalioglu A, Zakko S, Oh C-S, Kohanim S, Bryant JL, Kim EE. Combined Radiochemotherapy Using In Situ Hydrogel. Presented at the Annual Congress of the European Assocation of Nuclear Medicine in Istanbul/Turkey, October 15 19, 2005, Eur J Nucl Med Mol Imaging 2005; 32 (Supp 1): S48 (abstract 135).
- 213. Karacalioglu AO, Chanda M, Oh C-S, **Yang DJ**, Azhdarinia A, Kohanim S, Yu D-F, Bryant J, Kim EE.

  99m Tc-DMSA-LYSINE: Labeled essential amino acid to evaluate the synthesis of epigenetic material.

  Eur J Nucl Med Mol Imaging 2005; 32 (Supp 1): S124 (abstract P2).
- 214. Song H-C, Bom H-S, Heo Y, Kim S, Ahn S, Kim C-G, Yang DJ, Kim EE. The correlation of <sup>99m</sup>Tc-EC-metronidazole uptake with tumor volume in mice bearing CT-26 colon cancer. Eur J Nucl Med Mol Imaging 2005; 32 (Supp 1): S127 (abstract P18).
- 215. Song H-C, Ahn S, Bom H-S, Kim Y, Heo Y, Kim S, Kim C-G, Yang DJ, Kim EE. Different uptake of <sup>99m</sup>Tc-EC-metronidazole and <sup>18</sup>F-FDG and prediction of radiotherapy effect in patients with non-small cell lung cancer. Eur J Nucl Med Mol Imaging 2005; 32 (Supp 1): S140 (abstract P85).
- 216. Oh C-S, Kohanim S, Azhdarinia A, Yu D-F, Mendez R, Chanda M, Bryant JL, Kim EE, Yang DJ. Assessment of Pancreas Beta-Cell Activity with Tc-99m labeled Sulfonylurea Agents. 2005 Annual Meeting of the AAPS in Nashville, TN (Nov 6-10, 2005) Pharm Res 2005.
- 217. Kohanim S, **Yang DJ**, Azhdarinia A, Yu D-F, Oh C-S, Mendez R, Kim EE. <sup>99m</sup>Tc-EC-Annexin-V: A Novel Tracer for Apoptosis Imaging. 2005 Annual Meeting of the AAPS in Nashville, TN (Nov 6-10, 2005) Pharm Res 2005.
- 218. Azhdarinia A, Oh C-S, Kohanim S, Yu D-F, Mendez R, Chanda M, Bryant J, Kim EE, Yang DJ. Synthesis of <sup>99m</sup>Tc- ethylenedicysteine-glucosamine for assessment of tumor growth. 2005 Annual Meeting of the AAPS in Nashville, TN (Nov 6-10, 2005) Pharm Res 2005.
- 219. Wei I-C, Ho Y-S, Wu CC, Yu LP, Huang YH, Chanda M, Azhdarinia A, Yu DF, Yang DJ. Radiolabeled glycopeptide for angiogenesis imaging. 2005 Annual Meeting of the AAPS in Nashville, TN (Nov 6-10, 2005) Pharm Res 2005.
- 220. Wei I-C, Ho Y-S, Wu CC, Yu LP, Huang YH, Chanda M, Azhdarinia A, Yu DF, Yang DJ. Development of glycopeptide as a drug carrier. 2005 Annual Meeting of the AAPS in Nashville, TN

- (Nov 6-10, 2005) Pharm Res 2005.
- 221. Yang DJ, Kohanim S, Inoue T, Azhdarinia A, Yu D-F, Kim EE. Targeting lipid metabolism with <sup>99m</sup>Tc-GAP-TML. 2005 Annual Meeting of the AAPS in Nashville, TN (Nov 6-10, 2005) Pharm Res 2005.
- 222. Azhdarinia A, Yang DJ, Yu D-F, Mendez R, Zakko S, Oh C-S, Kohanim S, Bryant JL, Kim EE. Image-guided loco-regional cancer therapy using <sup>188</sup>Re-hydrogel. 2005 Annual Meeting of the AAPS in Nashville, TN (Nov 6-10, 2005) Pharm Res 2005.
- 223. Kim EE, Azhdarinia A, Inoue T, Oh C-S, Yang DJ. PET/SPECT targeted imaging of estrogen receptors with <sup>99m</sup>Tc- and <sup>68</sup>Ga-labeled estradiol. 91th Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, IL. Nov. 27- Dec. 2. 2005. Radiology, 2005 (LPR12-09).
- Azhdarinia A, Yu D-F, Yang DJ, Mendez R, Bryant JL, Kim EE. Characterization and acute toxicity of alginate hydrogel for combined radiochemotherapy. 53<sup>rd</sup> Annual Meeting of the Society of Nuclear Medicine. San Diego, June 3-7, 2006 J Nucl Med 2006;47(5):490 (abstract 1802).
- 225. Azhdarinia A, Yu D-F, Yang DJ, Oh C-S, Bryant JL, Mendez R, Kohanim S, Kim EE. Acute Toxicity, Dosimetry and PET and Planar Imaging of Tumor Hypoxia with Labeled Metronidazole. 53<sup>rd</sup> Annual Meeting of the Society of Nuclear Medicine. San Diego, June 3-7, 2006 J Nucl Med 2006;47(5):492 (abstract 1808).
- 226. Chanda M, Oh C-S, Azhdarinia A, Yang DJ, Bryant JL, Mendez R, Yang T, Yu D-F, Kohanim S, Kim EE. Assessment of tumor proliferation with <sup>68</sup>Ga-EC-Guanine by PET. 53<sup>rd</sup> Annual Meeting of the Society of Nuclear Medicine. San Diego, June 3-7, 2006 J Nucl Med 2006; 47(5):502 (abstract 1837).
- 227. Oh C-S, Yang DJ, Azhdarinia A, Bryant JL, Mendez R, Yu D-F, Kohanim S, Kim EE.Organic and aqueous synthesis of EC-DG for tumor glycolytic activity assessment. 53<sup>rd</sup> Annual Meeting of the Society of Nuclear Medicine. San Diego, June 3-7, 2006 J Nucl Med 2006;47(5):502 (abstract 1838).
- 228. Yang DJ, Azhdarinia A, Yu D-F, Chanda M, Oh C-S, Kim EE.Oligosaccharide conjugates for CT/PET and CT/SPECT hybrid imaging. 53<sup>rd</sup> Annual Meeting of the Society of Nuclear Medicine. San Diego, June 3-7, 2006 J Nucl Med 2006;47(5):520 (abstract 1893).
- 229. Mourtada F, AzhdariniaA, Oh C-S, **Yang DJ**, Chao KS. Infrared-based automated module for <sup>68</sup>Galabeled radiotracers synthesis. 53<sup>rd</sup> Annual Meeting of the Society of Nuclear Medicine. San Diego, June 3-7, 2006 J Nucl Med 2006;47(5):523 (abstract 1904).
- 230. Tzen K, Oh C-S, Mendez R, Azhdarinia A, Yang DJ. cGMP synthesis of 18F-FHTP for imging neuroendocrine tumors. 53<sup>rd</sup> Annual Meeting of the Society of Nuclear Medicine. San Diego, June 3-7, 2006 J Nucl Med 2006;47(5):524 (abstract 1906).
- 231. Bryant JL, Yang DJ, Kohanim S, Cristofanilli M, Azhdarinia A, Yu D-F, Kim EE.. Assessment of apoptosis with synthetic and human <sup>99m</sup>Tc-EC-Annexin-V. 53<sup>rd</sup> Annual Meeting of the Society of Nuclear Medicine. San Diego, June 3-7, 2006 J Nucl Med 2006;47(5):536 (abstract 2020).
- 232. Wei I-C, Ho Y, Wu C-C, Yu L-P, Huang Y-H, Chanda M, Azhdarinia A, Yu D-F, Yang DJ. Assessment efficacy of anti-angiogenic cancer therapy with radiolabeled glycopeptide. 53<sup>rd</sup> Annual Meeting of the Society of Nuclear Medicine. San Diego, June 3-7, 2006 J Nucl Med 2006;47(5):547 (abstract 2073).

Takahashi N, Yang DJ, Yu D-F, Kohanim S, Mendez R, Chanda M, Azhdarinia A, Oh C-S, Kim EE. Targeted imaging of estrogen receptors with <sup>99m</sup>Tc-GAP-EDL. 53<sup>rd</sup> Annual Meeting of the Society of Nuclear Medicine. San Diego, June 3-7, 2006 J Nucl Med 2006;47(5):547 (abstract 2075).

234. Yang DJ, Oh C-S, Chanda M, Azhdarinia A, Mendez R, Yu D-F, Bryant JL, Kim EE. Assessment of EGFR-TK with <sup>68</sup>Ga and <sup>99m</sup>Tc-labeled tyrosine. 53<sup>rd</sup> Annual Meeting of the Society of Nuclear Medicine. San Diego, June 3-7, 2006 J Nucl Med 2006;47(5):548 (abstract 2078).

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